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A SYSTEM APPROACH TO NAVY MEDICAL EDUCATION AND TRAINING. APPEN--ETC(U)  
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**AUG 74**

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












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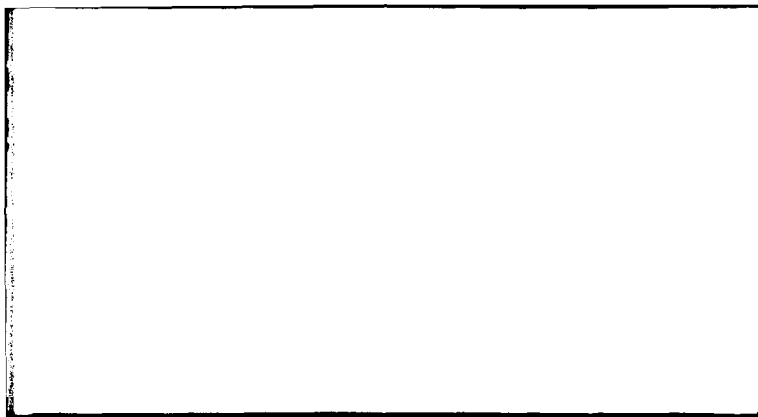
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APPENDIX 29.

COMPETENCY CURRICULUM FOR  
ADVANCED GENERAL DUTY CORPSMAN

APPLICATION OF A SYSTEM APPROACH  
U.S. NAVY MEDICAL DEPARTMENT  
EDUCATION AND TRAINING PROGRAMS  
FINAL REPORT

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ELECTE  
JUN 19 1980  
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Prepared under Contract to  
OFFICE OF NAVAL RESEARCH  
U.S. DEPARTMENT OF THE NAVY

Quida C. Upchurch, Capt., NC, USN  
Program Manager  
Education and Training R&D  
Bureau of Medicine and Surgery (Code 71G)

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currently designated Navy enlisted occupations, 20 Naval Enlisted Classification Codes (NEC's) were computerized. A set of 16 groupings that cover all designated occupations was developed so as to enhance the effectiveness of professionals and sub-professionals alike.

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## FOREWORD

The project, "Application of a System Approach to the Navy Medical Department Education and Training Programs," was initiated in May of 1969 as a realistic, comprehensive response to certain objectives set forth in ADO 43-03X, and to memoranda from both the Secretary of Defense and the Assistant Secretary of Defense, Manpower and Reserve Affairs. The Secretary's concern was stated in his memorandum of 29 June 1965, "Innovation in Defense Training and Education." More specific concerns were stated in the Assistant Secretary's memorandum of 14 June 1968, "Application of a System Approach in the Development and Management of Training Courses." In this he called for "vigorous and imaginative effort," and an approach "characterized by an organized training program with precise goals and defined operational interrelation among instructional system components." He also noted, "Job analyses with task descriptions expressed in behavioristic terms are basic and essential to the development of precise training goals and learning objectives."

### The Project

System survey and analysis was conducted relative to all factors affecting education and training programs. Subsequently, a job-analysis sub-system was defined and developed incorporating a series of task inventories ". . . expressed in behavioristic terms . . ." These inventories enabled the gathering of job activity data from enlisted job incumbents, and data relating to task sharing and delegation from officers of the Medical, Nurse and Dental Corps. A data management sub-system was devised to process incumbent data, then carry out needed analyses. The development of initial competency curricula based upon job analysis was implemented to a level of methodology determination. These methods and curriculum materials constituted a third (instructional) sub-system.

Thus, as originally proposed, a system capability has been developed in fulfillment of expressed needs. The system, however, remains untested and unevaluated. ADO 43-03X called for feasibility test and cost-effectiveness determination. The project was designed to so comply. Test and evaluation through the process of implementation has not proved feasible in the Navy Medical Department within the duration of the project. As designed and developed the system does have ". . . precise goals and defined operational interrelation among instructional system components." The latter has been achieved in terms of a recommended career structure affording productive, rewarding manpower utilization which bridges manpower training and health care delivery functions.

### Data Management Sub-System

Job analysis, involving the application of comprehensive task inventories to thousands of job incumbents, generates many millions of discrete bits of response data. They can be processed and manipulated only by high speed computer capability using rigorously designed specialty programs. In addition to numerical data base handling, there is the problem of rapidly and accurately manipulating a task statement data base exceeding ten thousand carefully phrased behavioral statements. Through the use of special programs, task inventories are prepared, printouts for special purposes are created following a job analysis application, access and retrieval of both data and tasks are efficiently and accurately carried out, and special data analyses conducted. The collective programs, techniques and procedures comprising this sub-system are referred to as the Navy Occupational Data Analysis Language (NODAL).

### Job Analysis Sub-System

Some twenty task inventory booklets (and associated) response booklets) were the instruments used to obtain job incumbent response data for more than fifty occupations. An inventory booklet contains instructions, formatted questions concerning respondent information ("bio-data"), response dimension definitions, and a list of tasks which may vary in number from a few hundred to more than a thousand per occupational field.

By applying NODAL and its associated indexing techniques, it is possible to assemble modified or completely different inventories than those used in this research. Present inventories were applied about three years ago. While they have been rendered in operational format, they should not be reapplied until their task content is updated.

Response booklets were designed in OPSCAN mode for ease of recording and processing responses.

Overall job analysis objectives and a plan of administration were established prior to inventory preparation, including the setting of provisional sample target sizes. Since overall data attrition was forecast to approximate twenty percent, final sample and sub-sample sizes were adjusted accordingly. Stratified random sampling techniques were used. Variables selected (such as rating, NEC, environment) determined stratifications, together with sub-population sizes. About fifteen percent of large sub-populations were sought while a majority of all members of small sub-populations were sought.

Administration procedures were established with great care for every step of the data collecting process, and were coordinated with sampling and data analysis plans. Once set, the procedures were formalized as a protocol and followed rigorously.

### Instructional Sub-System

Partial "competency curricula" have been composed as an integral sub-system bridging what is required as performance on the job with what is, accordingly, necessary instruction in the training process. Further, curriculum materials were developed to meet essential requirements for implementing the system so that the system could be tested and evaluated for cost effectiveness. However, due to the fact that test and evaluation was not feasible in the Navy Medical Department within the duration of the project, it was not possible to complete the development of the system through the test and evaluation phase. The inability to complete this phase also interrupted the planned process for fully developing the curricula; therefore, instead of completed curricula ready for use in the system, the curricula were partially developed to establish the necessary sub-system methodology. The competency curricula are based on tasks currently performed by job incumbents in 1971. (The currency of a given curriculum depends upon periodic analysis of incumbents' jobs, and its quality control resides in the evaluation of the performance competency of the program's graduates.)

A competency curriculum provides a planned course of instruction or training program made up of sequenced competency units which are, in turn, comprised of sequenced modules. These modules, emphasizing performance objectives, are the foundation of the curriculum.

A complete module would be comprised of seven parts: a cluster of related tasks; a performance objective; a list of knowledges and skills implied by the objective; a list of instructional strategies for presenting the knowledges and skills to the learner; an inventory of training aids for supporting the instructional strategies; a list of examination modes; and a statement of the required training time. In this project, curriculum materials have been developed to various levels of adequacy, and usually comprise only the first three parts; the latter four need to be prepared by the user.

The performance objective, which is the most crucial part of the module, is the basis for determining curriculum content. It is composed of five essential elements: the stimulus which initiates the behavior; the behavior; the conditions under which the behavior takes place; the criteria for evaluating the behavior; and the consequence or results of the behavior. A sixth element, namely next action, is not essential; however, it is intended to provide linkage for the next behavior.

Knowledges and skills listed in the module are those needed by the learner for meeting the requirements of the performance objective.



Instructional strategies, training aids, examination modes and training time have been specified only for the Basic Hospital Corps Curriculum. The strategies, aids and modes were selected on the basis of those considered to be most supportive in presenting the knowledges and skills so as to provide optimum learning effectiveness and training efficiency. The strategies extend from the classroom lecture as traditionally presented by a teacher to the more sophisticated mediated program for self-instruction. The training aids, like strategies, extend from the traditional references and handout material in the form of a student syllabus to mediated programs for self-instruction supported by anatomical models. Examination modes extend from the traditional paper and pencil tests to proficiency evaluation of program graduates on the job, commonly known as feedback. Feedback is essential for determining learning effectiveness and for quality control of a training program. The kind of instructional strategies, training aids and examination modes utilized for training are limited only by such factors as staff capability and training budget.

The training time specified in the Basic Hospital Corps Curriculum is estimated, based upon essential knowledge and skills and program sequence.

The competency curriculum module, when complete, provides all of the requirements for training a learner to perform the tasks set forth in the module. A module may be used independently or related modules may be re-sequenced into modified competency units to provide training for a specific job segment.

Since the curricula are based upon tasks performed by job incumbents in 1971, current analysis of jobs needs to be accomplished using task inventories that have been updated to reflect changes in performed tasks. Subsequent to job analysis, a revision of the curricula should be accomplished to reflect task changes. When the foregoing are accomplished, then faculty and other staff members may be indoctrinated to the competency curricula and to their relationship to the education and training system.

In addition to the primary use for the systematic training of job incumbents, these curricula may be used to plan for new training programs, develop new curricula, and revise existing curricula; develop or modify performance standards; develop or modify proficiency examinations; define billets; credentialize training programs; counsel on careers; select students; and identify and select faculty.

## The System

Three sub-systems, as described, comprise the proposed system for Education and Training Programs in the Navy Medical Department. This exploratory and advanced developmental research has established an overall methodology for improved education and training incorporating every possible means of providing bases for demonstrating feasibility and cost effectiveness. There remains only job analysis sub-system up-dating, instructional sub-system completion, and full system test and evaluation.

## Acknowledgements

The authors wish to acknowledge the invaluable participation of the several thousands of Naval personnel who served as respondents in inventory application. The many military and civilian personnel who contributed to developmental efforts are cited by name in the Final Report.

The authors also wish to acknowledge former colleagues for singularly important contributions, namely, Elias H. Porter, Ph.D., Carole K. Kauffman, R.N., M.P.H., Mary Kay Munday, B.S.N., R.N., Gail Zarren, M.S.W., and Renee Schick, B.A.

Identity and acknowledgement of the project Advisory Group during the project's final year is recorded in the Final Report.

Lastly, the project could not have been commenced nor carried out without the vision, guidance and outstanding direction of Ouida C. Upchurch, Capt., NC, USN, Project Manager.

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CURRICULUM STATUS WITH  
CONTINUED DEVELOPMENT RECOMMENDATIONS

A review of this competency curriculum indicates that it is at a preliminary stage of conceptulization. The majority of the modules are at a gross level of development.

Continued development requires not only an expansion of the scope of tasks and performances as they relate to a variety of situations in which the Advanced General Duty Corpsman functions, but an elaboration of the existing modules into a more manageable organization.

An assessment of the Medical Laboratory, Diagnostic Radiograph, Pharmacy, Environmental Health and Dental units needs to be made to determine the adequacy of the modules within these units. The majority of these modules have been transferred from other competency curricula with a minimum of modification. Such an assessment will probably reveal that the level of competency can be altered significantly as it may be too comprehensive for this competency level.

Continued efforts will be benefited by reviewing other competency curricula to assess the usefulness of selecting specific modules which can be modified for this competency area. This compilation of modules is a useful baseline for further development.

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT I: PATIENT SCREENING

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Sick Call Screening . . . . .	2
2	Sick Call Examinations . . . . .	3
3	Emergency Room Triage . . . . .	4



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit I: Patient Screening

MODULE 1: SICK CALL SCREENING

- TASKS
- a. Screen patient on arrival to determine which staff member patient should see
  - b. Have patient complete drug history questionnaire
  - c. Determine if personnel on sick call are fit for duty
  - d. Authorize excused/light duties
  - e. Prepare needed consultation and diagnostic forms, e.g., x-ray, lab

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | When personnel report for sick call  |
| (Behavior)    | The AGDC will screen patient for subsequent treatment by obtaining pertinent information, e.g., chief complaint, drug history, current and past treatment, where stationed; complete appropriate forms |
| (Conditions)  | Without supervision; using necessary forms   |
| (Criteria)    | Appropriate information obtained and all screening forms completed according to predetermined protocol and medical department requirements   |
| (Consequence) | Adequate patient information for determining next step in diagnostic process   |
| (Next Action) | Perform sick call exam and/or refer patient to clinic or physician   |

KNOWLEDGES AND SKILLS

Screening procedures  
Interview techniques  
Accuracy in recording information on records by typing and/or printing

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit I: Patient Screening

MODULE 2: SICK CALL EXAMINATIONS

- TASKS
- a. Check patient's sensory responses to taste, smell
  - b. Check patient's response to touch, pressure, temperature
  - c. Auscultate abdomen for bowel sounds
  - d. Auscultate lungs to detect abnormal sounds, e.g., rales, wheeze, rhonchi
  - e. Palpate abdomen for distension
  - f. Examine mucous membranes of nose/throat for inflammation
  - g. Examine for/report symptoms of oral abscesses
  - h. Report abnormal tissue conditions to dentist

PERFORMANCE OBJECTIVE

- (Stimulus) When a preliminary sick call examination is necessary
- (Behavior) The AGDC will examine the patient, record the findings from the examination and determine patient's fitness for duty
- (Conditions) With indirect supervision; using appropriate instruments for preliminary examination
- (Criteria) Physical examination performed according to established protocol; findings recorded completely and accurately
- (Consequence) Preliminary diagnostic information obtained to determine subsequent treatment required
- (Next Action) Refer to physician/clinic or provide treatment

KNOWLEDGES AND SKILLS

Protocol for performing preliminary physical examination  
Anatomy and physiology  
Recognition of abnormal conditions relative to preliminary physical examination

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit I: Patient Screening

MODULE 3: EMERGENCY ROOM TRIAGE

- TASKS
- a. Obtain chief complaint
  - b. Evaluate injury and separate into categories
  - c. Refer to appropriate area for care

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned to screen patients in the emergency room
- (Behavior) The AGDC will perform the necessary triage by obtaining the patient's chief complaint, evaluating the injury or medical condition and referring or transferring the patient to the correct source for the level of care indicated by the patient's condition
- (Conditions) With indirect supervision
- (Criteria) Appropriate evaluation of injury or condition; referral accomplished and medical care obtained according to established procedures for referring and transferring patients for care in an emergency situation
- (Consequence) Patient is directed to appropriate source for appropriate diagnostic care and/or treatment

KNOWLEDGES AND SKILLS

Interview techniques  
Assessment/evaluation of patient complaints  
Established protocol for referring/transferring patients in an emergency situation

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT II: OBTAINING PATIENT HISTORY

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	History of Present Illness . . . . .	6
2	Family History . . . . .	7
3	Social History . . . . .	8
4	Past Medical History . . . . .	9
5	Review of Systems . . . . .	10

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit II: Obtaining Patient History

MODULE 1: HISTORY OF PRESENT ILLNESS

- TASKS**
- a. Elicit chief complaint
  - b. Elicit patient identifying information, e.g., age, race, sex, occupation
  - c. Obtain information from patient regarding onset and course of symptoms of chief complaint
  - d. Elicit significant negatives pertaining to systems involved
  - e. Elicit pertinent symptom-descriptive clues, e.g., location, radiation, character, severity, time relations, related events, relief
  - f. Elicit other symptoms associated with complaint

**PERFORMANCE OBJECTIVE**

- (Stimulus) Upon receiving patient for general physical exam or treatment of specific complaint
- (Behavior) The AGDC will elicit all information pertinent to patient's present illness with special reference to chief complaint
- (Conditions) With supervision; in an examination room or office with relaxed atmosphere; using appropriate history forms
- (Criteria) Adequate, accurate information obtained according to protocol
- (Consequence) Accurate determination, description and recording of patient's present illness
- (Next Action) Collect additional subjective data per medical history protocol and/or report to supervisor

**KNOWLEDGES AND SKILLS**

Anatomy and physiology  
Medical terminology  
Interview techniques

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit II: Obtaining Patient History

MODULE 2: FAMILY HISTORY

- TASKS
- a. Elicit ages and health of parents, siblings and children
  - b. Elicit age at death and cause of death of parents, siblings and children
  - c. If suspicion of an inherited abnormality arises, elicit information to include a family chart of as many blood relatives as possible
  - d. Obtain information on diseases that run in the family
  - e. Obtain family history of specific significant diseases, e.g., present illness, heart disease, kidney disease, hematologic disease

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a patient for a general physical exam or treatment for a specific complaint
- (Behavior) The AGDC will elicit all information pertaining to family history with special emphasis on those areas related to patient's present illness
- (Conditions) Without supervision; in an examination room or office with a relaxed atmosphere; using appropriate history forms
- (Criteria) Accurate and complete description of patient's family history and associated factors is obtained according to protocol
- (Consequence) Accurate determination, description and recording of patient's family history with special reference to all areas related to present illness
- (Next Action) Collect additional subjective data per medical history protocol and/or report to supervisor

KNOWLEDGES AND SKILLS

Familiarity with inherited family diseases  
Interviewing techniques  
Areas covered in family history protocol

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit II: Obtaining Patient History

MODULE 3: SOCIAL HISTORY

- TASKS**
- a. Elicit developmental factors which played a role in producing the patient's present status
  - b. Elicit chronological review of the patient's entire life including place of birth, current residence, marital status, education, occupational history, leisure time, hobbies and habits
  - c. Elicit religious information on patient
  - d. Elicit financial and insurance information
  - e. Elicit information on any environmental or other factors which might relate to present or potential illness, e.g., exposure to fumes, marital problems

**PERFORMANCE OBJECTIVE**

- (Stimulus) Upon receiving a patient for a general physical exam or treatment for a specific complaint
- (Behavior) The AGDC will elicit information pertaining to the patient's social history with special reference to those items contributing to present illness
- (Conditions) Without supervision; in an examination room or office with a relaxed atmosphere; using appropriate history forms
- (Criteria) Accurate description of patient's social history and associated factors is obtained according to social history protocol
- (Consequence) Accurate determination, description and recording of the patient's social history with special reference to all areas related to present illness
- (Next Action) Collect additional subjective data per medical history protocol and/or report to supervisor

**KNOWLEDGES AND SKILLS**

Aspects of patient's social history which may be involved/reflected in present illness  
Interview techniques

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit II: Obtaining Patient History

MODULE 4: PAST MEDICAL HISTORY

- TASKS
- a. Elicit information on past hospitalization(s)
  - b. Elicit history of childhood illnesses and consequences
  - c. Elicit history and consequences of adult illnesses in chronological order
  - d. Select all pertinent information from old medical records

PERFORMANCE OBJECTIVE

- |               |   |
|---------------|---|
| (Stimulus)    | When a complete history is indicated  |
| (Behavior)    | The AGDC will elicit all pertinent information regarding the patient's past medical history with special reference to those areas which may have bearing on the present illness |
| (Conditions)  | With supervision; in an examination room or office with a relaxed atmosphere; using appropriate history forms   |
| (Criteria)    | Complete, accurate past medical history is obtained according to protocol   |
| (Consequence) | Accurate determination, description and recording of the patient's past medical history with special reference to all areas bearing on present illness                          |
| (Next Action) | Collect additional subjective data per medical history protocol and/or report to supervisor   |

KNOWLEDGES AND SKILLS

Anatomy and physiology  
Medical terminology  
Interview techniques



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit II: Obtaining Patient History

MODULE 5: REVIEW OF SYSTEMS

- TASKS
- a. Elicit information/symptoms pertaining to skin, hair and nails
  - b. Elicit information/symptoms pertaining to the head
  - c. Elicit information/symptoms pertaining to the eyes
  - d. Elicit information/symptoms pertaining to the ears, nose, throat
  - e. Elicit information/symptoms pertaining to the respiratory system
  - f. Elicit information/symptoms pertaining to the cardiac system
  - g. Elicit information/symptoms pertaining to the gastrointestinal system
  - h. Elicit information/symptoms pertaining to the genitourinary system
  - i. Elicit information/symptoms pertaining to the neurological system
  - j. Elicit information/symptoms pertaining to the musculoskeletal system
  - k. Elicit information/symptoms pertaining to psychiatric problems

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a patient for a general physical exam or treatment for a specific complaint
- (Behavior) The AGDC will elicit information pertaining to each body system with special reference to symptoms related to present illness
- (Conditions) With supervision; in an examination room or office with relaxed atmosphere; using appropriate history forms
- (Criteria) Complete and accurate review of systems is obtained according to protocol
- (Consequence) Accurate determination, description and recording of information concerning the patient's body systems with special reference to all areas related to present illness
- (Next Action) Record accumulated information regarding patient's present illness, past medical history, family history, social history and review of systems

MODULE 5 (Continued)

KNOWLEDGES AND SKILLS

Anatomy and physiology  
Medical terminology  
Interviewing techniques  
Review of systems protocol

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT III: PHYSICAL EXAMINATION

This unit includes the following modules:

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Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 1: VITAL SIGNS

- TASKS
- a. Determine temperature by oral, rectal or axillary mode
  - b. Determine apical/radial/femoral/carotid pulse rate
  - c. Determine respiratory rate
  - d. Take blood pressure

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receipt of patient for a physical exam  
(Behavior) The AGDC will determine and record patient's blood pressure, temperature, pulse rate and respiratory rate  
(Conditions) Without assistance; using a sphygmomanometer, thermometer, stethoscope and watch  
(Criteria) Accuracy in determining blood pressure, temperature, pulse and respiration rates; recognition of abnormalities and irregularities  
(Consequence) Accurate determination and recording of blood pressure, temperature, pulse and respirations; description of abnormalities and irregularities  
(Next Action) Obtain additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Use of sphygmomanometer, thermometers, stethoscope  
Normal standards  
Recognition of irregularities and abnormalities

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 2: GENERAL APPEARANCE

TASKS                      a. Observe and record general appearance of patient

PERFORMANCE OBJECTIVE

(Stimulus)	Upon receiving a patient for a physical exam
(Behavior)	The AGDC will observe and describe/record the patient's general appearance, e.g., attitude, mental status, body build
(Conditions)	Without supervision; using appropriate physical exam forms
(Criteria)	Accurately describing patient's general appearance
(Consequence)	Observation, description and recording of patient's general appearance providing information about patient's personality, distress, and reaction to his disease
(Next Action)	Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Observational techniques

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 3: SKIN

- TASKS
- a. Observe skin for texture, moisture, elasticity and temperature
  - b. Observe color of mucous membranes and nail beds
  - c. Observe for abnormalities of hair, i.e., amount and distribution
  - d. Observe skin for eruptions/scars/discoloration

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a patient for a physical exam or for treatment of a specific skin condition
- (Behavior) The AGDC will observe and palpate skin areas to determine condition of skin and identify specific anomalies
- (Conditions) Without supervision; using appropriate physical exam forms
- (Criteria) Accurately determine and describe condition of patient's skin
- (Consequence) Determination, description and recording of patient's skin condition
- (Next Action) Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of the skin  
Recognition of normal, healthy skin condition  
vs. skin anomalies

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 4: SKELETAL SYSTEM

TASKS	a. Observe for deformities and gross abnormalities of skeletal framework b. Examine for mobility of joints and spine c. Examine for bony tenderness d. Examine for clubbing, edema, varicosities
-------	---

PERFORMANCE OBJECTIVE

(Stimulus)	Upon receiving a patient for a physical exam or for treatment of specific conditions involving the spine, joints and/or bony framework
(Behavior)	The AGDC will examine the patient's spine, joints and bony framework
(Conditions)	In a well-lighted examination room; using an exam table and appropriate physical exam forms
(Criteria)	Complete and accurate description of abnormalities, deformities or other conditions of the spine, joints and bony framework according to protocol
(Consequence)	Determination and recording of the condition of the patient's joints, spine and skeletal framework
(Next Action)	Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of the skeletal system  
Recognition of normal vs. abnormal skeletal conditions  
Procedures and techniques to carry out a range of motion examination  
Palpation techniques

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 5: HEAD

TASKS            a. Observe patient's head  
                  b. Palpate patient's head

PERFORMANCE OBJECTIVE

(Stimulus)        Upon receiving a patient for a physical exam or for treatment of a specific condition involving the head  
(Behavior)        The AGDC will observe and palpate patient's head, examining for size, shape, evidence of trauma, tenderness, signs of injury or abnormality  
(Conditions)       Without supervision; using appropriate physical exam forms  
(Criteria)         According to protocol, accurately determining and describing the condition and configuration of the head with special reference to the hair and scalp  
(Consequence)     Determination, description and recording of condition of patient's head, providing data to aid in diagnosis of patient's condition  
(Next Action)     Collect additional objective data via physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of the head  
Recognition of normal vs. abnormal conditions of the head



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 6: EYES

- TASKS
- a. Examine eyelids
  - b. Examine conjunctiva
  - c. Examine sclera
  - d. Examine irises
  - e. Observe pupils for size, equality, regularity, reaction to light and accommodation
  - f. Observe extraocular movements
  - g. Test gross vision
  - h. Do fundoscopic exam with special reference to lens, optic disc, maculae, retinal vessels, retina and media
  - i. Test field of vision
  - j. Perform tonometry (intraocular pressure)

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | Upon receiving a patient for a physical exam or for treatment of a specific disease or condition involving the eyes      |
| (Behavior)    | The AGDC will inspect, test and/or examine all areas of the eye for disease and/or injury                                |
| (Conditions)  | Without supervision; using appropriate physical exam forms, ophthalmoscope, Snellen chart, tonometer, fundoscope         |
| (Criteria)    | Accurate determination and description of the physical condition of patient's eyes according to eye examination protocol |
| (Consequence) | Determination, description and recording of condition of patient's eyes  |
| (Next Action) | Collect additional objective data per physical exam protocol   |

KNOWLEDGES AND SKILLS

Anatomy and physiology of the eyes  
Recognition of normal vs. abnormal conditions of the eyes, including eyelids, conjunctiva, sclera, irises, pupils, lens, optic disc, maculae, retinal vessels, retina, media  
Use of ophthalmoscope, Snellen chart, tonometer, fundoscope  
Observational techniques

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 7: EARS

- TASKS
- a. Examine external auricles
  - b. Examine external ear canals
  - c. Examine mastoid processes
  - d. Examine tympanic membranes for perforation
  - e. Examine tympanic membranes for mobility, concavity, convexity
  - f. Test mobility, gross hearing (whispered voice) vs. conversational voice)
  - g. Perform Weber test
  - h. Perform Rinne test

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a patient for a physical exam or for treatment of a specific disease, injury or other condition involving the ear
- (Behavior) The AGDC will inspect, examine and/or test all areas of the ear
- (Conditions) Without supervision; in a well-lighted examination room; using an otoscope, wrist watch, tuning fork, speculum, pneumatoscope and appropriate physical exam forms
- (Criteria) Accurate determination and description of condition of patient's ears and associated structures according to ear examination protocol
- (Consequence) Determination, description and recording of the condition of patient's ears
- (Next Action) Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of ears and associated structures  
Recognition of normal vs. abnormal ear conditions  
Signs and symptoms of ear pathology  
Use of associated equipment, e.g., otoscope, pneumatoscope, tuning fork, speculum

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 8: NOSE

TASKS	a. Examine external configuration of the nose b. Examine vestibule c. Examine nasal septum d. Examine lower turbinate e. Test airway patency by occluding one nostril at a time
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PERFORMANCE OBJECTIVE

(Stimulus)	Upon receiving a patient for a physical exam or treatment of a specific disease, injury or other condition of the nose
(Behavior)	The AGDC will inspect, examine and/or test all areas of the nose for disease, injury, obstruction and/or other abnormalities
(Conditions)	Without supervision; in a well-lighted examination room; using appropriate physical exam forms, otoscope, nasal speculum
(Criteria)	Accurate determination and description of the condition of patient's nose and associated structures according to protocol
(Consequence)	Determination, description and recording of the condition of patient's nose
(Next Action)	Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of the nose and associated structures  
Recognition of nasal abnormalities  
Use of otoscope, nasal speculum

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 9: MOUTH AND THROAT

TASKS	a. Examine lips
	b. Examine teeth
	c. Examine gums
	d. Examine tongue
	e. Examine mucosa of cheeks, palate, etc.
	f. Examine salivary glands
	g. Examine tonsils
	h. Examine pharynx

PERFORMANCE OBJECTIVE

(Stimulus)	Upon receiving a patient for a physical exam or treatment of a specific disease, injury or other condition involving the mouth and throat
(Behavior)	The AGDC will examine and palpate all areas of the mouth and throat
(Conditions)	Without supervision; in a well-lighted examination room; using appropriate physical exam forms, tongue blades, light source
(Criteria)	Accurate determination and description of the condition of patient's mouth and throat according to examination protocol
(Consequence)	Determination, description and recording of the condition of patient's mouth and/or throat
(Next Action)	Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of mouth and associated structures  
Recognition of normal vs. abnormal conditions of the mouth and throat  
Use of tongue blade  
Observational techniques  
Palpation techniques

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 10: NECK

- TASKS
- a. Examine thyroid gland
  - b. Perform palpation to determine position and movement of trachea
  - c. Examine for nuchal rigidity
  - d. Examine lymph nodes
  - e. Examine neck veins and arteries

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a patient for a physical exam or for treatment of a specific condition of the neck
- (Behavior) The AGDC will examine all areas of the neck
- (Conditions) Without supervision; in a well-lighted examination room; using appropriate physical exam forms
- (Criteria) Accurate determination and description of the condition of patient's neck and associated structures
- (Consequence) Determination, description and recording of the condition of patient's neck
- (Next Action) Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of neck and associated structures  
Recognition of normal vs. abnormal conditions of the neck  
Palpation techniques

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 11: LYMPH NODES

TASKS a. Palpate lymph nodes

PERFORMANCE OBJECTIVE

(Stimulus)	Upon receiving a patient for a physical exam or treatment of a specific condition involving the lymph nodes
(Behavior)	The AGDC will palpate the lymph nodes
(Conditions)	In a well-lighted examination room; using an examination table, drape, appropriate physical exam forms
(Criteria)	Complete and accurate description of any tenderness, hardness, swelling or other abnormal conditions of lymph nodes
(Consequence)	Determination, description and recording of the condition of patient's lymph nodes
(Next Action)	Collect additional objective information per physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of the lymphatic system  
Recognition of normal vs. abnormal conditions of the lymphatic system  
Palpation techniques

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 12: CHEST AND LUNGS

- TASKS
- a. Observe respiratory movements
  - b. Observe symmetry with deep breath
  - c. Percuss diaphragm and determine excursion and symmetry
  - d. Percuss posterior lung fields (resonance)
  - e. Auscultate apices and bases (rales, rubs)
  - f. Palpate for presence of rhonchal fremitus and friction rubs
  - g. Examine for egophony
  - h. Examine for masses in breasts and/or discharge from nipples

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving patient for a physical exam or treatment of a specific condition involving the chest or lungs
- (Behavior) The AGDC will examine, palpate, percuss and auscultate all areas of the chest and lungs
- (Conditions) Without supervision; in a well-lighted examination room; using appropriate physical exam forms, stethoscope
- (Criteria) Accurate determination and description of the condition of patient's chest, lungs and associated structures according to standard examination procedures and protocol
- (Consequence) Determination, description and recording of the condition of patient's chest and lungs
- (Next Action) Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

- Anatomy and physiology of chest, lungs and associated structures
- Recognition of normal vs. abnormal conditions of the chest and lungs

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 13: HEART

- TASKS
- a. Inspect precordium for abnormal fullness and pulsation
  - b. Palpate precordium for shocks and thrills
  - c. Palpate suprasternal notch
  - d. Percuss chest to determine approximate size of heart
  - e. Auscultate for rate, rhythm, murmurs, venous hum, friction rub

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a patient for a physical exam or treatment of a specific condition involving the chest
- (Behavior) The AGDC will inspect, palpate, percuss and auscultate the heart
- (Conditions) With limited supervision; in a well-lighted room; using an examination table, stethoscope, appropriate forms
- (Criteria) Accurate determination and description of the present functioning/status of the heart according to examination protocol
- (Consequence) Determination, description and recording of the status of the patient's heart
- (Next Action) Collect additional objective data for data base per exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of heart and associated systems  
Recognition of normal vs. abnormal conditions of the heart  
Adequate hearing  
Use of stethoscope  
Palpation and auscultation technique  
Auscultation positions, e.g., lateral decubitus, sitting



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 14: ABDOMEN

TASKS

- a. Inspect abdomen
- b. Percuss abdomen
- c. Auscultate abdomen
- d. Palpate abdomen

PERFORMANCE OBJECTIVE

(Stimulus)	Upon receiving a patient for a physical exam or treatment of a specific abdominal condition
(Behavior)	The AGDC will inspect, percuss, auscultate and palpate the abdominal area
(Conditions)	Without supervision; in a well-lighted examination room; using an examination table, appropriate physical exam forms, stethoscope
(Criteria)	Accurate determination and description of the condition of patient's abdomen according to abdominal exam protocol
(Consequence)	Determination, description and recording of the state of patient's abdominal area providing pertinent information for diagnosis of patient's condition
(Next Action)	Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

- Anatomy and physiology of abdomen and associated structures
- Recognition of normal vs. abnormal conditions of abdomen and associated structures
- Use of stethoscope
- Observational techniques
- Percussion, auscultation and palpation techniques
- Inspection for: contour, engorged veins, retractions, protrusions, visible peristalsis
- Percussion of kidneys, spleen, bladder for: dullness, distension, shifting dullness
- Auscultation for: peristaltic sounds, bruits
- Palpation of liver, spleen, kidneys for: tenderness, resistance, rigidity, fluid wave, masses, hernia

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 15: FEMALE GENITALIA

- TASKS
- a. Examine external genitalia for signs of inflammation, swelling, bleeding, discharge
  - b. Examine vagina and cervix
  - c. Palpate uterus and adnexa for size, position and consistency
  - d. Examine for cystoceles/rectoceles

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a female patient for a physical exam or treatment of a specific condition involving the genitalia
- (Behavior) The AGDC will examine and palpate genitalia, noting abnormalities
- (Conditions) Without supervision but with the assistance of a nurse or hospital Corpsman; in a well-lighted room; using an examination table with appropriate pelvic exam equipment, appropriate physical exam forms, sterile exam gloves, vaginal speculum, lubricating jelly
- (Criteria) Accurate determination and description of condition of patient's genitalia and associated structures according to standard procedures and protocol
- (Consequence) Determination, description and recording of condition of genitalia and associated areas
- (Next Action) Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of female genitalia and associated structures  
Recognition of normal vs. abnormal conditions  
Use of vaginal speculum  
Preparation of slides, smears, cultures  
Procedures and techniques for examination of the female genitalia

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 16: MALE GENITALIA

- TASKS
- a. Examine penis/scrotum/testes/epididymis
  - b. Examine spermatic cords
  - c. Examine testicular masses by transillumination
  - d. Examine accessory glands, i.e., prostate, Cowper's
  - e. Palpate inguinal canals and groin area
  - f. Examine for congenital malformations
  - g. Examine for discharge/ulcerations
  - h. Examine for hernia

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a male patient for a physical exam or treatment of a specific condition involving the genitalia
- (Behavior) The AGDC will examine and palpate the genitalia, noting any abnormal conditions
- (Criteria) Accurate determination and description of the condition of patient's genitalia according to standard procedures and protocol
- (Consequence) Determination, description and recording of findings involving condition of the male genitalia and related areas
- (Next Action) Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

- Anatomy and physiology of male genitalia and associated structures
- Recognition of normal vs. abnormal conditions of male genitalia
- Digital examination technique
- Preparation of slides, smears, cultures

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 17: RECTAL AREA

- TASKS
- a. Examine for hemorrhoids and/or masses
  - b. Examine for anal fissures and/or fistulas
  - c. Examine for sphincter tone
  - d. Examine prostate for size, shape and consistency

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a patient for a physical exam or treatment of a specific condition involving the rectal area
- (Behavior) The AGDC will examine and palpate the rectal area
- (Conditions) Without supervision but with the assistance of a nurse and/or Corpswave for female patient; in a well-lighted room; using an examination table, rectal glove, lubricating jelly and appropriate physical exam forms
- (Criteria) Accurate determination and description of condition of patient's rectal area and associated structures according to rectal examination protocol
- (Consequence) Determination, description and recording of condition of rectal area
- (Next Action) Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

Anatomy and physiology of rectal area and associated structures  
Recognition of normal vs. abnormal rectal conditions  
Proper use of rectal glove

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit III: Physical Examination

MODULE 18: NEUROLOGICAL SYSTEM

- TASKS
- a. Note patient's mental status
  - b. Test cranial nerves
  - c. Test sensory perception, e.g., vibratory response, pain
  - d. Test deep tendon reflexes
  - e. Test Babinski reflex
  - f. Test muscle strength, status and tone
  - g. Test coordination (finger to nose, heel to knee)
  - h. Test cerebellar functions
  - i. Test gait
  - j. Test autonomic functions
  - k. Test for pupillary response
  - l. Test for Kernig's sign
  - m. Test for stiffness of neck

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a patient for a physical exam or treatment of a specific neurological difficulty
- (Behavior) The AGDC will examine and test all areas of the neurological system
- (Conditions) Without supervision; in a well-lighted room; using an examination table, tuning fork, percussion hammer, reflex hammer, pocket light screener, tongue blades, cotton swabs and appropriate physical exam forms
- (Criteria) Accurate determination and description of the patient's neurological condition according to standard neurological procedures and protocol
- (Consequence) Determination, description and recording of patient's neurological condition
- (Next Action) Collect additional objective data per physical exam protocol

KNOWLEDGES AND SKILLS

- Anatomy and physiology of nervous system and associated factors
- Recognition of normal vs. abnormal neurological condition
- Use of tuning fork, percussion hammer, tongue blades, cotton swabs

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT IV: ADMINISTRATIVE AND CLERICAL DUTIES

This unit includes the following modules:

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2	Reports . . . . .	33

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit IV: Administration and Clerical Duties

MODULE 1: RECORD MAINTENANCE

- TASKS
- a. Log in patients to clinic/department/sick call
  - b. Keep and update files of personnel with history of communicable diseases
  - c. File completed/returned chits/reports in patient record
  - d. Schedule appointments for clinic/department, e.g., maintain appointment book
  - e. Maintain call list to fill broken/cancelled appointments

PERFORMANCE OBJECTIVE

- (Stimulus) Routinely and upon receiving a patient in the medical facility
- (Behavior) The AGDC will log in patient, schedule appointments and maintain records
- (Conditions) Without supervision
- (Criteria) According to BuMed instructions
- (Consequence) Complete and accurate maintenance of personnel health records

KNOWLEDGES AND SKILLS

- Command policies/BuMed instructions
- Interpersonal skills

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit IV: Administrative and Clerical Duties

MODULE 2: REPORTS

TASKS	a. Prepare report of medical examination b. Record physician's examination findings c. Make entries on chronological record
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PERFORMANCE OBJECTIVE

(Stimulus)	When necessary
(Behavior)	The AGDC will prepare reports, make required entries on the chronological record and record physician's examination findings
(Conditions)	Without supervision; using required forms
(Criteria)	Accurately recording information
(Consequence)	Information entries complete and accurate
(Next Action)	File reports/records

KNOWLEDGES AND SKILLS

Command policy  
Medical terminology  
Standard health record forms  
Legible penmanship



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT V: ROUTINE MEDICAL LABORATORY DIAGNOSTIC PROCEDURES

This unit includes the following modules:

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Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 1: CAPILLARY BLOOD SPECIMEN COLLECTION

- TASKS
- a. Prepare site for capillary puncture, i.e., finger tip, toe, ear lobe or heel
  - b. Collect blood in proper receptacles for tests requested
  - c. Prepare blood film on slide
  - d. Make dilutions

PERFORMANCE OBJECTIVE

- (Stimulus) When a capillary blood specimen is required for diagnosis
- (Behavior) The AGDC will prepare site, collect capillary blood in proper receptacles and, when necessary, make blood films on slides and dilute specimens
- (Conditions) Without supervision; using alcohol sponges, hemolets, capillary tubes (with and without anticoagulants), glass slides, calibrated pipettes, diluting fluids
- (Criteria) Blood must be obtained from site at which the circulation is adequate; the blood should be free flowing and not diluted with tissue juices or alcohol; the blood film must be adequate and the dilutions should be accurately made
- (Consequence) Adequate capillary blood specimen for the tests requested is collected and prepared for analysis

KNOWLEDGES AND SKILLS

Appropriate body sites from which to obtain capillary blood

Appropriate methods for stimulating circulation at puncture site

Criteria for making adequate blood smear

Appropriate diluting fluids

Dilution procedures

Proper receptacle for specific test

Capillary puncture techniques

Procedures for filling capillary tubes from a puncture wound

Principles and techniques of diluting with micropipettes

Principles and procedures for making adequate peripheral blood films

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 2: VENOUS BLOOD SPECIMEN COLLECTION

- TASKS
- a. Position patient
  - b. Select venipuncture site
  - c. Prepare venipuncture site
  - d. Perform venipuncture with vacutainer or with needle and syringe
  - e. Collect specimen
  - f. Change vacutainer tube or syringe
  - g. Label tubes

PERFORMANCE OBJECTIVE

- (Stimulus) When a venous blood specimen is required for diagnosis
- (Behavior) The AGDC will position patient, select and prepare venipuncture site, perform venipuncture, collect adequate and appropriately preserved or anticoagulated specimen and label tubes
- (Conditions) Without supervision; using alcohol sponge, tourniquet, vacutainer, needle adaptor or needle and syringe, tubes with and without anticoagulants
- (Criteria) Clean, swift venipuncture with minimal patient trauma; specimen collected must be in the appropriate amount and proper container for laboratory analysis
- (Consequence) Adequate venous blood specimen collected for required tests
- (Next Action) Check venipuncture site for bleeding and apply adhesive strip if necessary; perform test or send specimen to appropriate area for testing

KNOWLEDGES AND SKILLS

Patient positioning for venipuncture  
Proper venipuncture sites  
Proper preservation procedures, e.g., immediate cooling for ammonia or acid phosphatase  
Principles and use of anticoagulants  
Use of vacutainer  
Use of needle and syringe  
Proper tubes and anticoagulants to use for specific tests  
Care of patient following venipuncture  
Technique for venipuncture with minimum patient trauma

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 3: LABORATORY SPECIMEN HANDLING

- TASKS
- a. Measure/dilute/preserve lab specimen, e.g., urine, blood, for subsequent testing
  - b. Prepare/preserve routine (nontissue) lab specimen for shipment
  - c. Centrifuge blood and separate serum or plasma

PERFORMANCE OBJECTIVE

- (Stimulus) When necessary to prepare laboratory specimen for subsequent testing
- (Behavior) The AGDC will prepare the specimen for testing or shipment
- (Conditions) Using available lab materials in an inpatient situation
- (Criteria) According to the nature of the specimen and type of examination to be performed
- (Consequence) Proper preparation/preservation of lab samples to insure accurate test results
- (Next Action) Record and report

KNOWLEDGES AND SKILLS

- Procedures to centrifuge blood, separate plasma and serum
- Techniques to prepare/preserve lab specimens for testing/shipment

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 4: ROUTINE URINALYSIS

- TASKS
- a. Determine color and clarity of urine by visual inspection
  - b. Determine specific gravity of urine
  - c. Determine pH of urine
  - d. Determine presence and concentration (semiquantitative estimate) of protein in urine
  - e. Determine presence and concentration (semiquantitative estimate) of reducing substances in urine
  - f. Determine presence and concentration (semiquantitative estimate) of glucose in urine
  - g. Determine presence and concentration (semiquantitative estimate) of ketone bodies in urine
  - h. Determine presence and concentration (semiquantitative estimate) of blood in urine
  - i. Determine presence and concentration (semiquantitative estimate) of bile in urine
  - j. Identify and semiquantitate (estimate number per high power/low power field) organized substances on slide preparation of urinary sediment by microscopic examination
  - k. Identify unorganized substances on slide preparation of urinary sediment by microscopic examination
  - l. Prepare report of results

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | When routine urinalysis is required for diagnosis  |
| (Behavior)    | The AGDC will perform routine urinalysis   |
| (Conditions)  | Without supervision; using refractometer, urinometer, centrifuge, microscope, glass slides and coverslips, commercial reagents, control specimens and procedure manual |
| (Criteria)    | Control specimens produce expected results   |
| (Consequence) | Valid report of semiquantitative results on appropriate form   |
| (Next Action) | Report physiologically incompatible results to supervising physician   |

## MODULE 4 (Continued)

### KNOWLEDGES AND SKILLS

Types of urine specimens (timed, random, early a.m., 24-hour) required, if any, for each task  
Types of urine preferred, if any, for each task  
Chemical and physical changes that occur in urine upon standing  
Urine preservatives required/preferred, if any, for each task  
Urine specimen collection techniques  
Color of urine and variations of diagnostic significance  
Causes of cloudy/milky appearance of urine  
Reagent stability and methods of determining reagent potency  
Technical precautions necessary to maintain reagent potency  
Technical precautions necessary to achieve accurate and reproducible test results  
Normal ranges for each test result  
Physiologic incompatibilities of test results  
Use and operation of refractometer, urinometer, centrifuge and microscope  
Recognition of microscopic morphology of elements found in urinary sediment  
Recognition of microscopic morphology of common extraneous contaminants of urinary sediment

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 5: PERIPHERAL MORPHOLOGY TECHNIQUE

- TASKS
- a. Fix and stain smears to demonstrate cell morphology
  - b. Determine morphological variations of erythrocytes and leukocytes
  - c. Determine leukocyte differential
  - d. Check smear for adequate morphology and number of platelets

PERFORMANCE OBJECTIVE

- (Stimulus) When staining and examination of a peripheral blood film is required for diagnosis
- (Behavior) The AGDC will prepare smears for microscopic examination by fixing blood film in methanol and staining with Wright's or Wright-Giemsa stain; examine stained slide noting morphology of erythrocytes and leukocytes, differential of leukocytes and number and morphology of platelets
- (Conditions) With supervision; using Wright's or Wright-Giemsa stain and buffer solution, microscope with oil immersion lens, cell counting tabulator
- (Criteria) Erythrocytes should be yellowish red and neutrophils should have dark purple chromatin, pink cytoplasm and lilac granules; erythrocytes must be distributed so that appropriate morphology can be distinguished; differentiate 100 leukocytes; abnormal leukocytes should be checked by supervisor; platelets should not be agglutinated
- (Consequence) A white cell differential count and a platelet estimate are obtained and any morphologic aberrations of erythrocytes, leukocytes and platelets are noted
- (Next Action) Record results; send slide with abnormal cell forms to pathologist for review; file slide

KNOWLEDGES AND SKILLS

Procedures for dehydration and fixation of blood  
Principles and use of Romanowsky stains, e.g.,  
Wright's, Giemsa's, May-Grunwald  
Causes and remedies of abnormal staining colors  
Normal and abnormal erythrocyte morphology  
Cell maturation and morphologic characteristics  
Leukocyte types: normal vs. abnormal, neutrophil,  
band, eosinophil, basophil, lymphocyte, monocyte  
Recognition of young, immature leukocytes  
Recognition of abnormal leukocyte morphology

MODULE 5 (Continued)

KNOWLEDGES AND SKILLS

Platelet morphology  
Technique for estimating platelet numbers  
Normal values  
Use of oil immersion microscope  
Use of differential cell tabulator



Unit V: Routine Medical Laboratory Diagnostic Procedures

**TASKS**

- Determine hemoglobin concentration using cyanmethemoglobin method

(Stimulus)	When a hemoglobin determination on a blood sample is required
(Behavior)	The AGDC will obtain absorbance reading after diluting .02 ml blood in cyanmethemoglobin and determine hemoglobin concentration in grams/100 ml
(Conditions)	Without supervision; using hemoglobin pipette (.02 ml), autodiluter to dispense 5 ml cyanmethemoglobin reagent, graph prepared from known hemoglobin standard (4 concentrations), cuvettes, spectrophotometer, reagent blank
(Criteria)	Duplicate measurements must agree within $\pm 0.5$ grams/100 ml; standard must read within $\pm 3$ absorbance units of its original reading on calibration curve; quality control specimen must read within acceptable range; hemoglobin must be $1/3$ the value of the hematocrit
(Consequence)	Hemoglobin concentration derived in grams/100 ml blood
(Next Action)	Record results

Pipetting techniques  
Proper care and use of cures, spectrophotometers  
and autodiluters  
Conversion of absorbance reading to hemoglobin  
concentration from a standard calibration curve

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 7: HEMATOCRIT DETERMINATION

TASKS a. Perform microhematocrit by centrifugation

PERFORMANCE OBJECTIVE

(Stimulus)	Upon determining need for microhematocrit on a blood sample
(Behavior)	The AGDC will fill two capillary tubes to approximately 75 percent of capacity with well-mixed blood, seal one end, centrifuge at 16,000 rpm for 3 minutes, read result and note any icteric plasma and/or hemolysis
(Conditions)	With limited technical supervision; using capillary tubes, plasticine seal or flame, hematocrit reader, hematocrit centrifuge
(Criteria)	Quality control specimens to check technique and centrifuge; specimen must be done in duplicate and agree $\pm 1$ percent; results should be three times greater than the hemoglobin value $\pm 2$ percent; specimen must not be hemolyzed
(Consequence)	Plasma/packed cell ratio reported as volume/packed red cells in percent; icteric plasma noted, if present
(Next Action)	Report results

KNOWLEDGES AND SKILLS

Principles, use and operation of microhematocrit centrifuge, relation of rpm to relative centrifugal force and to time required for complete packing  
Proper use of and techniques for obtaining plasma/packed cell ratio from hematocrit reader  
Normal values  
Precautions to avoid error, i.e., avoid hemolysis, do not include buffy coat in reading cell level and be sure maximum packing has occurred  
Techniques for filling and sealing capillary tubes

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 8: BASIC COAGULATION SCREENING

- TASKS
- a. Perform tourniquet test
  - b. Determine bleeding time
  - c. Evaluate clot retraction and clot lysis
  - d. Perform prothrombin and partial thromboplastin times (manually or automated)
  - e. Perform test for fibrinogen level
  - f. Perform test for fibrin split products

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receipt of request for basic coagulation screening on a patient
- (Behavior) The AGDC will perform tourniquet test, bleeding time, clot retraction, clot lysis, prothrombin time, partial thromboplastin time, fibrinogen level, and fibrin split products test
- (Conditions) With indirect supervision; using sphygmomanometer, stopwatch, hemolet, alcohol sponge, filter paper, clotted whole blood, citrated plasma, water bath at 37 degrees centigrade, pipettes, test tubes, reagent spectrophotometer, fibrin split products kit, fibrometer or other automated coagulation analyzer
- (Criteria) Count petechiae after five minutes with sphygmomanometer properly inflated; perform sharp puncture and regularly absorb blood on filter paper watching time closely; control within proper range on coagulation tests and obtain adequate duplications
- (Consequence) Results obtained for tourniquet test, bleeding time, clot retraction and clot lysis, prothrombin time, partial thromboplastin time, fibrinogen and fibrin split products
- (Next Action) Report normal results; present abnormal results to supervising physician for evaluation

KNOWLEDGES AND SKILLS

Methodologies and sources of error for basic coagulation screening tests

Normal values

Operational procedures for any automated coagulation analyzers used

Troubleshooting and minor repair for the automated coagulation analyzers used

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 9: ERYTHROCYTE SEDIMENTATION RATE

TASKS                   a. Fill sedimentation rate tube  
                         b. Place in vertical rack  
                         c. Determine erythrocyte sedimentation rate

PERFORMANCE OBJECTIVE

(Stimulus)           Upon determination of need for erythrocyte sedimentation rate  
(Behavior)           The AGDC will observe and determine erythrocyte sedimentation rate one hour after filling appropriate sedimentation rate tube to the proper level with appropriately anticoagulated blood and placing the tube in a vertical rack  
(Conditions)          With indirect supervision; using Wintrobe or Westegren sedimentation rate tubes, long-tipped pipettes, vertical positioning racks, timer  
(Criteria)           Appropriate tube must be filled to the proper mark with well-mixed anticoagulated blood. Avoid bubbles. The tube must be placed in a vertical position and left standing undisturbed at room temperature for exactly one hour. Test should be initiated within three hours of blood collection and results read at the appropriate time  
(Consequence)       Erythrocyte sedimentation rate expressed in mm/hour  
(Next Action)       Record result

KNOWLEDGES AND SKILLS

Possible technical conditions causing false/abnormal results  
Wintrobe method  
Westegren method  
Normal values  
Pipetting, Westegren  
Accurate filling of Wintrobe tube with disposable pipette  
Techniques for proper positioning of tube and reading of scale on tube

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 10: PRIMARY CULTURING, SMEAR PREPARATION AND STAINING

- TASKS
- a. Prepare routine stains
  - b. Inoculate culture media
  - c. Prepare routine smears
  - d. Prepare for bacterial colony counts by calibrated loop
  - e. Prepare for bacterial counts by dilution
  - f. Inoculate bacterial broth prior to plating media
  - g. Stain smears to demonstrate possible presence of bacteria

PERFORMANCE OBJECTIVE

- (Stimulus) Upon determination of need for culturing to determine bacterial growth or for staining
- (Behavior) The AGDC will sterilize a platinum wire loop and inoculate onto media and/or broth, prepare smear, label slides adequately for identification and delineation of area in which the smear is to be placed and stain smear
- (Conditions) With indirect supervision; using appropriate wire loop, flame, solid and liquid media, glass slides, chemical and heat fixatives and Gram stains
- (Criteria) Upon technical review, growth and isolation of bacterial colonies, media inoculation and preparation and staining of smears are judged correctly performed according to established quality control criteria, standard testing, staining techniques and modifications, and laboratory protocol
- (Consequence) Consistently valid testing for bacterial growth, isolation of bacterial colonies with their proper distribution on plates and accurately prepared and stained smears for microbiologic interpretation
- (Next Action) Incubate inoculated media for growth and identification and examine smear microscopically for interpretation

KNOWLEDGES AND SKILLS

Sterilizing/flaming technique  
Inoculation techniques  
Smear preparation techniques  
Preparation techniques for bacterial colony counts  
Staining techniques

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 11: PROCESSING SPECIMENS FOR CULTURING AND STAINING

TASKS                   a. Select appropriate culture media  
                          b. Log direct smear, stained/unstained

PERFORMANCE OBJECTIVE

(Stimulus)           Upon determination of need to stain microbiologic specimen  
(Behavior)           The AGDC will identify the specimen, log it in, determine what diagnostic media (e.g., simple, enriched, selective) or smear (stained or unstained) should be prepared and label the received slides adequately for identification and delineation of area in which the smear is to be placed  
(Conditions)          With indirect supervision; using appropriate log and local laboratory list of primary media for identification of bacterial pathogens  
(Criteria)            Upon technical review is found correct, i.e., appropriate media and/or smear based on source of specimen  
(Consequence)        Determination of appropriate initial media for culture isolation and preparation of correctly labeled slide  
(Next Action)         Inoculation of diagnostic media and broth for growth and further identification of bacterial pathogens and staining of needed smears

KNOWLEDGES AND SKILLS

Principles and procedures to ensure safety and sterility in handling specimens  
Types of media most suitable for isolation and identification of pathogens from different sites  
Proper slide identification and logging methods  
Host-parasite relationship as it applies to bacteriologic disease  
Clinical correlation  
Epidemiology of microbial disease

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 12: MICROSCOPIC INTERPRETATION OF BACTERIA

TASKS

- a. Recognize bacteria by Gram stain
- b. Recognize bacteria by special purpose stains
- c. Identify bacteria by fluorescent staining

PERFORMANCE OBJECTIVE

(Stimulus) After preparation of a stained specimen for microscopic interpretation

(Behavior) The AGDC will interpret the stained smear by clinical microscopy

(Conditions) With limited technical supervision; using the appropriate microscope with proper attachments

(Criteria) Upon technical review is found correctly performed with regard to quality control and standardization and according to laboratory examination technique

(Consequence) Proper interpretation of stained bacterial smears with reliable and reproducible results

(Next Action) Report organisms seen

KNOWLEDGES AND SKILLS

Theory of microscopic illumination

Bacterial morphology

Bacterial staining properties

Normal and abnormal flora

Use of light microscopic equipment and attachments

Use of fluorescent microscope

Identification of microorganisms as to gram-positive and -negative cocci or bacillus

Correlation of results with type of specimen

Quality control procedures

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)  
Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 13: BACTERIAL RECOGNITION BY CULTURE

TASKS

- a. Recognize bacteria on basic culture media
- b. Recognize bacteria on selective media
- c. Recognize bacteria on enriched media
- d. Recognize bacteria by colonial morphology
- e. Recognize bacteria by odor characteristics

PERFORMANCE OBJECTIVE

(Stimulus)	Upon determining need for preliminary identification of bacteria as to possible genera and species or group
(Behavior)	The AGDC will perform basic pathogen preliminary identification by morphologic colonial characteristics and physiochemical reaction on selective or enriched media and report on appropriate form
(Conditions)	With supervision; using appropriate media, inoculation, incubation temperature, wire loop and flame
(Criteria)	Upon review is judged correctly performed in accordance with quality control and current testing procedures
(Consequence)	Possible pathogen recognition
(Next Action)	Determine if biochemical testing is needed and submit isolates for sensitivity studies, if relevant

KNOWLEDGES AND SKILLS

Basic colonial morphology  
Growth requirements of microorganisms  
Enriched and selective media  
Selection of isolated colonies  
Techniques of subculturing in media and broth  
Recognition of common groups of pathogens and nonpathogens



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 14: MYCOLOGY TESTING

- TASKS
- a. Do KOH preps of fungal/yeast specimen
  - b. Determine presence of fungus using culture techniques
  - c. Determine presence of fungus using staining techniques
  - d. Demonstrate capsule by India ink method
  - e. Perform antimicrobial susceptibility testing of fungi
  - f. Demonstrate fungus by serologic techniques

PERFORMANCE OBJECTIVE

- (Stimulus) Upon determination of need for fungal culture and identification
- (Behavior) The AGDC will culture the specimen to isolate and identify the etiologic agents, if any, of the superficial and/or cutaneous mycoses
- (Conditions) With supervision; using appropriate bacteriologic hood, incubators, KOH, glass slides, stains, India ink, antibiotics and serologic materials
- (Criteria) Performed in accordance with quality control and standard safety and procedural techniques
- (Consequence) Isolation and identification of fungi and their antimicrobial susceptibility
- (Next Action) Report results

KNOWLEDGES AND SKILLS

Growth requirements for fungi and yeast  
Culture and microscopic morphology of fungi and yeast  
Safety precautions  
Morphologic characteristics in vivo and in vitro  
Recognition of fungi/yeast in KOH prep, stained specimen and culture  
Antimicrobial susceptibility testing procedures for fungi  
Assimilation and fermentation tests used in the identification of yeasts  
Use of microculture for identification of fungi  
Biochemical tests used for identification of fungi  
Standard procedure for culture of mycologic specimens

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 15: SPECIMEN PREPARATION FOR PARASITIC EXAMINATION

- |       |  |
|-------|--|
| TASKS | <ul style="list-style-type: none"><li>a. Emulsify feces for testing</li><li>b. Prepare MIF (merthiolate-iodine-formalin) preparation</li><li>c. Recover parasitic ova and larvae by flotation method</li><li>d. Prepare direct fecal smear in hypotonic solution</li><li>e. Prepare wet mounts in isotonic solutions</li><li>f. Prepare thick and thin blood smears for blood parasites</li><li>g. Stain smears to demonstrate parasites</li><li>h. Recover and preserve adult worms for diagnosis</li></ul> |
|-------|--|

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | Upon determination of need for parasitic examination of feces  |
| (Behavior)    | The AGDC will prepare specimen for examination for ova and adult parasites   |
| (Conditions)  | Without technical assistance; using appropriate glass slides and coverslips, centrifuge, wooden applicator sticks, test tubes and reagents |
| (Criteria)    | Performed in accordance with standard parasitologic preparation and examination techniques and procedures                                  |
| (Consequence) | Preparation of fecal and/or body fluid specimen for parasite recovery and identification   |
| (Next Action) | Perform microscopic examination of fecal sediment and blood smears   |

KNOWLEDGES AND SKILLS

Specimen preparation for specific examination  
Safety precautions in handling biologic material  
Function and operation of centrifuge and exhaust hood  
Principles and techniques of adult parasite preservation for identification  
Reagent preparation techniques  
Stain preparation techniques  
Principles and techniques of specimen preparation for parasitic recovery  
Preparation of thick and thin blood smears for blood parasite examinations

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 16: BASIC FECAL CHEMICAL ANALYSIS

- TASKS
- a. Perform morphologic examination of feces for form, consistency, color, mucus, pus and plant material
  - b. Test for occult blood using chemical solutions and reagent strips
  - c. Perform qualitative tests for fecal fat, bilirubin, urobilirubin and starch granules by staining methods

PERFORMANCE OBJECTIVE

- (Stimulus) Upon determination of need for basic fecal chemical analysis
- (Behavior) The AGDC will perform basic fecal chemical assays
- (Conditions) With limited supervision; using appropriate reagents, controls and microscope
- (Criteria) Performed in accordance with standard parasitologic technique for microscopic and chemical testing
- (Consequence) Valid results on appropriate form demonstrating diagnostic evidence for proper treatment
- (Next Action) Refer diagnostic problems to physician and report results

KNOWLEDGES AND SKILLS

Anatomy and physiology of hepatic-biliary, pancreatic and gastrointestinal tracts

Normal value ranges of fecal chemicals found in fecal specimens

Principles of chemical reactions with feces

Preparation and use of reagents

Principles and operation of microscope

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit V: Routine Medical Laboratory Diagnostic Procedures

MODULE 17: SYPHILIS SCREENING

TASKS a. Do nontreponemal syphilis tests

PERFORMANCE OBJECTIVE

(Stimulus)	Upon determination of need for nontreponemal antibody (reagin) testing
(Behavior)	The AGDC will perform qualitative and/or quantitative syphilis testing
(Conditions)	With indirect supervision; utilizing appropriate glassware, reagents and properly prepared specimens
(Criteria)	Upon technical review, nontreponemal testing is judged correctly performed with regard to pipetting technique, quality control and utilization of standard testing procedures as set by the National Communicable Disease Center, e.g., calibration of delivery needles
(Consequence)	Results will demonstrate consistently valid testing for syphilis
(Next Action)	Report results

KNOWLEDGES AND SKILLS

Specimen preparation procedures  
Commercially available reagents  
Preparation of controls  
Use of equipment, e.g., rotating machine, glass slides with ceramic rings, syringes with calibrated delivery needle  
Testing accuracy of delivery needle  
Rotation time differences  
Reading test results  
Use of test kits, e.g., RPR-rapid plasma reagin (circle) card test kits, microflocculation testing kits  
Clinical correlation  
Normal values  
Principles of chemical reactions  
Confidential nature of information derived from testing

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT VI: ROUTINE DIAGNOSTIC RADIOGRAPHS

This unit includes the following modules:

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2	Interpretation of Radiographs . . . . .	56

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit VI: Routine Diagnostic Radiographs

MODULE 1: MAKING AND PROCESSING ROUTINE RADIOGRAPHS

- TASKS
- a. Make and process routine radiographs of extremities, e.g., upper, lower
  - b. Make and process routine radiographs of trunk, e.g., chest, abdomen, pelvis
  - c. Make and process routine radiographs of head, e.g., skull, mastoids, teeth
  - d. Make and process routine radiographs of spinal column, e.g., vertebrae

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | Upon determining need for routine diagnostic x-rays  |
| (Behavior)    | The AGDC will make the needed radiographs, process film and prepare it for diagnostic evaluation, and enter appropriate information into records |
| (Criteria)    | Technically adequate radiographs for interpretation  |
| (Consequence) | Preparation of radiographs for use in diagnosing an injury or other condition  |

KNOWLEDGES AND SKILLS

Use of x-ray equipment  
Techniques for radiographic procedures  
Maintenance of logs/records and storage of film  
Destruction/disposal of film  
Criteria for determining technical adequacy of radiographs

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit VI: Routine Diagnostic Radiographs

MODULE 2: INTERPRETATION OF RADIOGRAPHS

TASKS	a. Read radiographs of extremities
	b. Read radiographs of trunk
	c. Read radiographs of head
	d. Read radiographs of spinal column

PERFORMANCE OBJECTIVE

(Stimulus)	After processing films
(Behavior)	The AGDC will read radiographs
(Conditions)	In consultation with physician as required; using the current radiologic texts
(Criteria)	Read films with radiologic competency
(Consequence)	Recognition of abnormal conditions appearing on radiographs
(Next Action)	Report and record results; treat or refer; order further studies as indicated

KNOWLEDGES AND SKILLS

Radiographic techniques  
Anatomy  
Use of reference texts  
Radiographic interpretation; differentiation between normal and abnormal conditions  
Recognition of abnormalities of head  
Recognition of abnormalities of extremities  
Recognition of abnormalities of abdomen, e.g., perforation, obstruction, foreign body, fluid, air

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT VII: ELECTROCARDIOGRAPHY

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Standard Electrocardiogram . . . . .	58
2	Electrocardiogram Interpretation . . . . .	59



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit VII: Electrocardiography

MODULE 1: STANDARD ELECTROCARDIOGRAM

- TASKS
- a. Prepare conductive pastes
  - b. Apply/change/adjust leads or needle electrodes, e.g., monitor ECG
  - c. Take electrocardiogram

PERFORMANCE OBJECTIVE

- (Stimulus) Upon determination of need for ECG
- (Behavior) The AGDC will set up the ECG machine, explain the test to patient, apply the electrodes and run a standard 12 lead ECG
- (Conditions) With indirect supervision; using an ECG machine, electrodes
- (Criteria) ECG machine must be standardized to 1 millivolt= 1 cm deflection; electrocardiogram taken according to standard procedures at 25mm/sec or as directed, free of artifacts, properly labeled and mounted
- (Consequence) Visual graphic display for interpretation of electrical heart action
- (Next Action) Submit tracing for interpretation

KNOWLEDGES AND SKILLS

ECG technique  
Electrical safety and grounding  
Local mounting technique  
Recognition of technical errors or serious clinical disorder  
Use and operation of related equipment, e.g., electrocardiograph apparatus, needle electrode

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit VII: Electrocardiography

MODULE 2: ELECTROCARDIOGRAM INTERPRETATION

TASKS                    a. Interpret electrocardiogram

PERFORMANCE OBJECTIVE

(Stimulus)	After taking or upon receiving an ECG reading
(Behavior)	The AGDC will interpret the ECG, noting abnormal rhythms and abnormal morphology, and identifying common variations of normal rhythms
(Conditions)	With indirect supervision; using ECG interpretive material
(Criteria)	Interpretive procedures will be carried out quickly and accurately
(Consequence)	Accurately interpreted electrocardiograms
(Next Action)	Treat identified patient according to ECG interpretation

KNOWLEDGES AND SKILLS

Anatomy and physiology of circulatory system  
Purpose of ECG

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT VIII: PATIENT DIAGNOSIS AND TREATMENT

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Preliminary Diagnosis of Disease or Other Presenting Medical Condition . . . . .	61
2	Initial Treatment of Disease or Other Presenting Medical Condition . . . . .	63

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit VIII: Patient Diagnosis and Treatment

MODULE 1: PRELIMINARY DIAGNOSIS OF DISEASE OR OTHER PRESENTING  
MEDICAL CONDITION

- TASKS
- a. Make preliminary diagnosis of patient condition
  - b. Evaluate seriousness of patient's condition

PERFORMANCE OBJECTIVE

- (Stimulus) When seeing patients independent of a physician  
(Behavior) The AGDC will make a preliminary diagnosis of patient's condition and determine need for immediate treatment, additional consultation or transfer to other facility  
(Conditions) Without supervision; using patient's comprehensive history, diagnostic equipment, medical references and manuals of patient conditions  
(Criteria) Accurate evaluation of patient's condition according to established protocols and procedures  
(Next Action) Initiate treatment as necessary; notify proper chain of command of diagnosis and prognosis

KNOWLEDGES AND SKILLS

Use and operation of diagnostic equipment  
Procedures and protocols for preliminary diagnosis of patient conditions, for example:  
Genitourinary: nephritis, cystitis, urethritis, renal colic, epididymitis, prostatitis  
Communicable infections: gonorrhea, syphilis, bacillary dysentery, amebic dysentery, hepatitis, mononucleosis, malaria, mumps, chancroid  
Cardiovascular: cerebrovascular accident, congestive heart failure, angina pectoris, hypertension, myocardial infarction, pulmonary embolism  
Gastrointestinal: gastroenteritis, stomatitis, appendicitis, ulcer, gastritis, intestinal obstruction, cholecystitis  
ENT: external ear infection, otitis media, ruptured ear drum, tonsillitis  
Inflammatory Conditions: arthritis, bursitis  
Dermatology: eczema, psoriasis, acne, impetigo, toxic dermatosis, fungal skin infection, pilonidal cyst/abscess, herpes labialis, furuncles/carbuncles  
Respiratory: asthma, bronchitis, pleurisy, pneumonia, sinusitis, tuberculosis

MODULE 1 (Continued)

Eye: conjunctivitis, iritis, stye  
Dental: periodontal abscess, cheilosis,  
gingivitis, pericoronitis, pulpitis,  
periapical abscess, denture irritation, oral  
ulcer  
Musculoskeletal: hernia  
Wound Infections: post-surgical, traumatic

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit VIII: Patient Diagnosis and Treatment

MODULE 2: INITIAL TREATMENT OF DISEASE OR OTHER PRESENTING  
MEDICAL CONDITION

- TASKS
- a. Provide initial medical care to patient
  - b. Prescribe medications
  - c. Prescribe therapeutic support
  - d. Provide first aid/emergency treatment in life threatening situations

PERFORMANCE OBJECTIVE

- (Stimulus) After symptomatic diagnosis of disease or other presenting medical condition and after consultation with physician, if possible and necessary
- (Behavior) The AGDC will provide initial medical care to patient, prescribing medications, treatment and therapeutic support as indicated; observe and record patient response; remove patient from active duty roster, advising the commanding officer as necessary; arrange for transport of patient from ship to physician environment as necessary; provide necessary first aid/emergency care to patients with life threatening conditions or irreversible organ damage prior to contacting medical officer for definitive treatment procedures
- (Conditions) Without immediate supervision; using preliminary diagnostic information, Merck Manual and related medical reference materials, standard sick bay equipment and supplies
- (Criteria) Initial therapeutic treatment given according to current treatment protocols and procedures, with concurrence of physician, as necessary; effective treatment to provide relief and prevent further injury or disease; symptomatic relief in absence of communication with physician; effective life saving measures; timely removal of patient from active duty/timely evacuation of patient as indicated; termination or alteration of treatment because of adverse reaction, lack of symptomatic relief or physician consent; accurate medical records
- (Consequence) Proper initial medical care provided to patient in the absence of a physician
- (Next Action) Continue treatment in accordance with physician consult; eliminate symptomatic complaint and return patient to active duty; complete appropriate patient care records

## MODULE 2 (Continued)

### KNOWLEDGES AND SKILLS

Procedures and protocols for initial patient treatment, for example:

- Genitourinary: nephritis, cystitis, urethritis, prostatitis, renal colic, epididymitis
- Communicable infections: gonorrhea, syphilis, bacillary dysentery, amebic dysentery, hepatitis, mononucleosis, malaria, mumps, chancroid
- Cardiovascular: cerebrovascular accident, congestive heart failure, angina pectoris, hypertension, myocardial infarction, pulmonary embolism
- Gastrointestinal: gastroenteritis, stomatitis, appendicitis, ulcer, gastritis, intestinal obstruction, cholecystitis, abdominal pain, hemorrhoids
- ENT: external ear infection, otitis media, ruptured ear drum, tonsillitis, sinusitis, sore throat, colds
- Inflammatory conditions: arthritis, bursitis
- Dermatology: eczema, psoriasis, acne, impetigo, toxic dermatosis, fungal skin infection, pilonidal cyst/abscess, herpes labialis, furuncles/carbuncles, skin rashes, allergies
- Respiratory: asthma, bronchitis, pleurisy, pneumonia, tuberculosis
- Eye: conjunctivitis, iritis, stye
- Dental: periodontal abscess, cheilosis, gingivitis, pericoronitis, pulpitis, periapical abscess, denture irritation, oral ulcer
- Musculoskeletal: hernia
- Wound infections: post-surgical, traumatic

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT IX: PATIENT FOLLOW-UP

This unit includes the following module:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Follow-Up Treatment . . . . .	66



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit IX: Patient Follow-Up

MODULE 1: FOLLOW-UP TREATMENT

- TASKS
- a. Plan/modify diagnostic procedures according to patient's response and need
  - b. Confer with medical personnel regarding patient treatment/progress
  - c. Modify/change patient treatment plan
  - d. Follow up/evaluate patient treatment/progress after discharge from medical facility

PERFORMANCE OBJECTIVE

- (Stimulus) Routinely when treating a patient  
(Behavior) The AGDC will follow up the patient's progress and response to treatment, conferring with other medical personnel when possible, and modify treatment plan according to patient's needs  
(Conditions) Using patient's medical records and reports, current subjective/objective information from other medical personnel, patient, family members, etc.  
(Criteria) Up-to-date treatment plan and follow-up/evaluation reports on file  
(Consequence) Modifications and changes in patient's treatment  
(Next Action) Continue follow-up

KNOWLEDGES AND SKILLS

- Follow-up/evaluation procedures
- Discrimination between adequate treatment response and an adverse response which requires change in treatment or additional diagnosis
- Awareness of available resources to aid in patient care

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT X: PHARMACY

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Ordering . . . . .	68
2	Inventory of Drugs Other Than Controlled Substances . . . . .	69
3	Inventory of Narcotics and Controlled Drugs . . . . .	70
4	Inventory of Drugs with Expiration Dates . . .	71
5	Records for Narcotics and Controlled Substances . . . . .	72
6	Filling and Dispensing of Noncontrolled Drug Prescriptions . . . . .	73
7	Filling and Dispensing Controlled Drug Prescriptions . . . . .	74
8	Maintenance of Poison and Antidote Locker . .	75
9	Emergency and Special Medical Treatment Kits . . . . .	76
10	Routine Pharmacy Administrative Duties . . . .	77

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 1: ORDERING

TASKS                   a. Check drug stock for supply needs

PERFORMANCE OBJECTIVE

(Stimulus)	When submitting routine orders to replenish stock
(Behavior)	The AGDC will inventory stock to determine needs
(Conditions)	Using stock control cards and local supply procedures
(Criteria)	Timely submission of supply requests to maintain adequate stock levels in accordance with local supply procedures
(Consequence)	Adequately stocked pharmacy

KNOWLEDGES AND SKILLS

Local supply procedures  
Stock control

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 2: INVENTORY OF DRUGS OTHER THAN CONTROLLED SUBSTANCES

TASKS                    a. Inventory drugs other than controlled substances

PERFORMANCE OBJECTIVE

(Stimulus)	Routinely, on established inventory dates
(Behavior)	The AGDC will count each drug product and record
(Conditions)	With indirect supervision; using appropriate recording materials
(Criteria)	Performed according to established procedures; an immediate random audit verifies the accuracy of the inventory
(Consequence)	Accurate record of drugs on hand other than controlled substances
(Next Action)	Adjust stock to proper levels

KNOWLEDGES AND SKILLS

Location of various drugs  
Appropriate inventory method  
Appropriate inventory forms

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 3: INVENTORY OF NARCOTICS AND CONTROLLED DRUGS

TASKS a. Check/count narcotics/controlled drugs

PERFORMANCE OBJECTIVE

(Stimulus)	According to established schedule
(Behavior)	The AGDC will prepare appropriate letter reports for the Commanding Officer and precount and arrange controlled drugs as they appear on the inventory form
(Conditions)	With supervision
(Criteria)	In strict compliance with BuMed instructions and with no errors
(Consequence)	Effective accountability of controlled drugs
(Next Action)	Send inventory report to authorizing pharmacist

KNOWLEDGES AND SKILLS

BuMed instructions  
Recognition of a controlled drug or narcotic  
Inventory procedures

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 4: INVENTORY OF DRUGS WITH EXPIRATION DATES

TASKS a. Monitor expiration dates of pharmaceuticals

PERFORMANCE OBJECTIVE

(Stimulus)	Routinely, at standard intervals
(Behavior)	The AGDC will check the expiration dates of all appropriate pharmaceuticals and maintain proper records
(Conditions)	With supervision
(Criteria)	Minimum amount of drugs have to be returned or destroyed
(Consequence)	Prevention of the use of expired pharmaceuticals, maintenance of appropriate inventory levels of drugs with expiration dates and recording of expiration date on appropriate form
(Next Action)	Destroy outdated pharmaceuticals or return to manufacturer according to standard procedures or supervisor's instructions

KNOWLEDGES AND SKILLS

Location and awareness of the receipt of  
extension of potency date notices  
Which drugs have expiration dates  
Use of appropriate forms for record keeping

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 5: RECORDS FOR NARCOTICS AND CONTROLLED SUBSTANCES

- TASKS
- a. Make entries into controlled drug/alcohol log
  - b. Check/count narcotics/controlled drugs
  - c. Prepare storage for supply of narcotics/controlled drugs
  - d. Prepare summaries of narcotic/controlled drug/alcohol issues
  - e. Maintain inventory of precious metals/narcotics
  - f. Assist in precious metals/narcotics inventory

PERFORMANCE OBJECTIVE

- (Stimulus) When filing a prescription for a controlled drug or narcotic
- (Behavior) The AGDC will make appropriate log entries and obtain necessary signatures
- (Conditions) With minimal supervision; using pen, log
- (Criteria) Accurate running account of narcotics and controlled drugs kept according to BuMed instructions
- (Consequence) Required information recorded legally and correctly
- (Next Action) Make reports

KNOWLEDGES AND SKILLS

- Use of BuMed and NavMed manuals
- Record-keeping procedures for narcotics and controlled substances
- Necessity for such procedures

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 6: FILLING AND DISPENSING OF NONCONTROLLED DRUG PRESCRIPTIONS

- TASKS
- a. Issue filled prescriptions
  - b. Transcribe physician's orders
  - c. Check prescribed medications for incompatibilities of administration or mixing
  - d. Check prescriptions for overdosage
  - e. Check prescriptions for accuracy of calculations
  - f. Check prescriptions for completeness, e.g., drug, dose, form, prescriber identification
  - g. Check prescriptions for incompatibility/ idiosyncracies of concurrently prescribed medications
  - h. Number prescriptions with machine

PERFORMANCE OBJECTIVE

- (Stimulus) After writing a prescription for a noncontrolled drug or upon receipt of a prescription
- (Behavior) The AGDC will check the prescription for completeness and accuracy and will fill the prescription
- (Conditions) With supervision
- (Criteria) Prescription accurately filled, labeled and correctly numbered in sequence, according to established procedures
- (Consequence) Correctly filled prescription
- (Next Action) File prescription request; have pharmacist dispense prescription

KNOWLEDGES AND SKILLS

Interpretation of prescriptions  
Drug actions  
Toxicology of drug  
Drug-drug interactions  
Drug-food interactions  
Generic and trade names of drugs  
Reference materials required  
Associated pharmaceutical mathematics  
Recognition of excessive prescribed dose  
Compounding techniques  
Typing skills  
Recognition of physician's writing



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 7: FILLING AND DISPENSING CONTROLLED DRUG PRESCRIPTIONS

TASKS

- a. Fill controlled drug/alcohol prescription
- b. Record issued narcotics/controlled drugs and alcohol on perpetual inventory

PERFORMANCE OBJECTIVE

(Stimulus)

After prescribing a controlled drug or upon presentation of a prescription for controlled drugs

(Behavior)

The AGDC will check the prescription for completeness and accuracy, fill the prescription, when necessary have patient sign on reverse side of prescription and give any special instructions regarding use of medication, e.g., when driving or operating machines

(Conditions)

(Criteria)

Without supervision  
Prescription checked for completeness and accuracy; accurately typed label; prescription correctly numbered in accordance with BuMed instructions and established procedures

(Consequence)

(Next Action)

Correctly filled controlled drug prescription  
Record issues; have pharmacist dispense

KNOWLEDGES AND SKILLS

How to fill a prescription  
BuMed instructions  
Precautions when taking drugs

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 8: MAINTENANCE OF POISON AND ANTIDOTE LOCKER

TASKS                    a. Prepare and maintain antidote section/locker  
                          b. Safeguard poisons

PERFORMANCE OBJECTIVE

(Stimulus)	When instructed by supervisor
(Behavior)	The AGDC will maintain antidote locker or section, properly store poisons and insure that accurate record of antidote/poison supply is kept on outside of locker
(Conditions)	Without supervision; using appropriate containers and specified drugs
(Criteria)	According to supervisor's instructions and local policies
(Consequence)	These actions will insure a stock of readily available antidotes and safeguard poisons

KNOWLEDGES AND SKILLS

Supervisor's instructions  
Maintenance of accurate inventory of drugs and  
poisons in locker  
Rotation of drugs and poisons as required by  
expiration date

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 9: EMERGENCY AND SPECIAL MEDICAL TREATMENT KITS

- TASKS
- a. Prepare, replace and/or restock emergency and special medical treatment kits
  - b. Prepare inventory cards

PERFORMANCE OBJECTIVE

- (Stimulus) When directed or when kits need to be prepared or restocked
- (Behavior) The AGDC will prepare emergency and special medical treatment kits and record control numbers and expiration date on an inventory card for periodic review
- (Conditions) With selective supervision; using appropriate supplies
- (Criteria) Prompt and accurate replacement or stocking of kits, e.g., emergency drug kits should be restocked immediately upon return, following BuMed instructions or standards established by the Pharmacy and Therapeutics Committee and utilizing drugs with longest expiration date
- (Consequence) Adequate stock of up-to-date emergency and special medical treatment kits

KNOWLEDGES AND SKILLS

Preparation of inventory cards  
Familiarity with packaging and protecting materials  
Appropriate containers  
Medications and supplies for emergency and special medical treatment kits, e.g., immunization, mass casualty, emergency drug supply (kit, box, drawer) and poison antidote tray

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit X: Pharmacy

MODULE 10: ROUTINE PHARMACY ADMINISTRATIVE DUTIES

- TASKS
- a. Calculate future drug supply requirements for the pharmacy
  - b. Prepare the summary of prescriptions filled for inpatients and outpatients monthly/quarterly for submission to administrative technician
  - c. Determine whether to destroy or to return pharmaceuticals to manufacturer
  - d. Update narcotic ledger
  - e. Sign for narcotics and restricted drugs
  - f. Do formal inventory of narcotics and controlled drugs
  - g. Complete report forms on adverse drug reaction
  - h. Answer inquiries regarding drug reaction
  - i. Answer personnel inquiries regarding mixing/administering

PERFORMANCE OBJECTIVE

- |               |   |
|---------------|---|
| (Stimulus)    | When responsible for routine pharmacy duties          |
| (Behavior)    | The AGDC will perform routine administration duties   |
| (Conditions)  | Using standard forms                                  |
| (Criteria)    | Correctly, according to current BuMed instructions    |
| (Consequence) | Performance of routine pharmacy administrative duties |
| (Next Action) | Submit forms as required                              |

KNOWLEDGES AND SKILLS

- Use of NavMed instructions manual
- Use of typewriter and tape recorder
- Familiarity with pharmacy function
- Arithmetic and basic algebra
- Tables of weights and measures

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT XI: CONSULTATION/REFERRAL

This unit includes the following modules:

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1	Consultation/Referral . . . . .	79
2	Transfer of Patient to Remote Medical Facility . . . . .	80

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XI: Consultation/Referral

MODULE 1: CONSULTATION/REFERRAL

TASKS                   a. Recommend need for consultation/referral  
                         b. Initiate consultation/referral

PERFORMANCE OBJECTIVE

(Stimulus)           When a preliminary examination and/or screening  
                         or significant change in patient's condition  
                         indicates the need for physician consultation  
                         and/or possible transfer to a medical facility  
                         adequate for managing the patient's condition  
(Behavior)           The AGDC will recommend needed action to  
                         superiors and initiate the consultation and/or  
                         referral  
(Criteria)           According to established protocol, with accurate  
                         and prompt determination of factors in patient's  
                         condition necessitating consultation/referral  
(Consequence)       Referral of patient and/or consultation with  
                         physician to direct care of patient  
(Next Action)       Transfer patient to appropriate facility, if  
                         necessary

KNOWLEDGES AND SKILLS

Recognition of need for consultation, referral  
or transfer

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XI: Consultation/Referral

MODULE 2: TRANSFER OF PATIENT TO REMOTE MEDICAL FACILITY

TASKS                      a. Coordinate transfer of patient to remote medical facility

PERFORMANCE OBJECTIVE

(Stimulus)	When a patient must be transported to a remote medical facility
(Behavior)	The AGDC will coordinate the transfer process, e.g., contact the facility, obtain appropriate transportation and verify completeness of patient's medical records
(Criteria)	According to protocol and patient's condition
(Consequence)	Patient is safely and expeditiously transferred to appropriate medical facility
(Next Action)	Follow up transferred patient via telephone and/or written communication

KNOWLEDGES AND SKILLS

Procedures for coordination of patient transfer to remote medical facility

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT XII: MINOR SURGERY

This unit includes the following modules:

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1	Setting Up Instruments . . . . .	82
2	Bleeder Control . . . . .	83
3	Local Anesthesia . . . . .	84
4	Excision of Cyst . . . . .	85
5	Wart Removal . . . . .	86
6	Suturing Minor Wounds . . . . .	87
7	Facial Suturing . . . . .	88
8	Intravenous Cutdown . . . . .	89



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XII: Minor Surgery

MODULE 1: SETTING UP INSTRUMENTS

TASKS                      a. Select/set up instruments for minor surgical procedure

PERFORMANCE OBJECTIVE

(Stimulus)	When ordered to set up for a minor surgical procedure
(Behavior)	The AGDC will locate and open appropriate sterile pack or tray and any other instruments that may be required; if not used immediately, the AGDC will drape the area with a sterile drape
(Conditions)	Without assistance; in a surgical situation; using required packs/trays, instruments, drapes
(Criteria)	Using sterile technique; sterile pack or tray opened without contamination; other appropriate instruments added without additional requests from surgeon
(Consequence)	A sterile instrument set ready for use in a minor surgical procedure
(Next Action)	Perform or assist with procedure

KNOWLEDGES AND SKILLS

Instruments required for procedure  
Sterile technique  
Techniques to open and close packs and trays without contamination

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Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XII: Minor Surgery

MODULE 2: BLEEDER CONTROL

- TASKS
- a. Cauterize bleeders with chemical, e.g., silver nitrate stick, powder
  - b. Clamp blood vessels
  - c. Apply pressure dressing

PERFORMANCE OBJECTIVE

- |               |   |
|---------------|---|
| (Stimulus)    | Having a patient with a bleeding wound  |
| (Behavior)    | The AGDC will control the bleeding, e.g., cauterize, clamp, apply pressure dressing |
| (Conditions)  | With supervision; using cauterizer, silver nitrate sticks, clamps, dressings        |
| (Criteria)    | Control and stoppage of bleeding  |
| (Consequence) | Bleeding will be controlled and stopped   |
| (Next Action) | Suture wound  |

KNOWLEDGES AND SKILLS

Principles and techniques of cauterization  
Principles and techniques for clamping  
Techniques to calm/soothe patient  
Use of pressure dressings

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XII: Minor Surgery

MODULE 3: LOCAL ANESTHESIA

TASKS                   a. Choose proper anesthetic  
                         b. Administer tissue infiltration/local anesthetic  
                         c. Apply topical anesthetic

PERFORMANCE OBJECTIVE

(Stimulus)           When local anesthesia is required for minor surgery  
(Behavior)           The AGDC will prepare the patient and administer  
                         the local anesthetic by injection or topical  
                         application  
(Conditions)          Using an anesthetic, syringe and needle, alcohol  
                         swab  
(Criteria)           Administered at site of minor surgery until  
                         anesthesia is obtained  
(Consequence)       Patient anesthetized at site of minor surgery  
(Next Action)       Perform the minor surgical procedure

KNOWLEDGES AND SKILLS

Types of anesthetics  
Anatomy and physiology  
Techniques for administering anesthetics  
Recognition of adverse reactions to anesthetic  
Methods for evaluation of depth of anesthesia  
Manual dexterity

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XII: Minor Surgery

MODULE 4: EXCISION OF CYST

TASKS a. Excise sebaceous cyst/lipoma

PERFORMANCE OBJECTIVE

(Stimulus) When a patient presents with a sebaceous cyst or lipoma  
(Behavior) The AGDC, after verifying that it is in fact a cyst and that it is not infectious, will prepare the surgical site, administer a local anesthetic and excise and remove the cyst  
(Conditions) Without supervision; using appropriate instruments and supplies  
(Criteria) Maintaining sterile technique; no infection develops; scarring is minimal as judged by supervisor  
(Consequence) Cyst is removed without complications and with minimal scar tissue  
(Next Action) Follow up/evaluate patient treatment

KNOWLEDGES AND SKILLS

Anatomy and physiology of skin  
Minor surgical techniques  
Techniques to secure patient confidence  
Suturing procedures

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XII: Minor Surgery

MODULE 5: WART REMOVAL

- TASKS
- a. Treat wart with chemical agent, e.g., trichloroacetic acid
  - b. Treat wart with liquid nitrogen
  - c. Dress area

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving a patient with a wart to be removed
- (Behavior) The AGDC will set up instruments and chemical agents for wart removal, prepare surgical site and remove wart from affected area
- (Conditions) With technical supervision; using appropriate chemical agents and instruments
- (Criteria) Performed quickly and professionally according to procedures in Merck Manual; no adverse side effects develop, e.g., infection
- (Consequence) Removal of the patient's wart as painlessly as possible and with no resulting infection
- (Next Action) Dress as directed

KNOWLEDGES AND SKILLS

Chemical agent to use  
Procedure to use  
Handling of sterile supplies  
Handling of chemicals

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XII: Minor Surgery

MODULE 6: SUTURING MINOR WOUNDS

TASKS                   a. Perform surgical preparation of skin site  
                          b. Administer local/topical anesthetic  
                          c. Suture skin

PERFORMANCE OBJECTIVE

(Stimulus)           When a patient presents himself with a minor laceration (nonfacial) requiring sutures  
(Behavior)           The AGDC will prepare the skin site, administer a local or topical anesthetic and suture the laceration  
(Conditions)          Without supervision; using appropriate materials and equipment, e.g., suture set, suture materials, antiseptic agents, razor  
(Criteria)            Good approximation of skin with sutures neatly applied according to unit standards; maintenance of sterile technique  
(Consequence)        These actions will result in closure of the laceration by safe application of sutures, promotion of healing and minimal risk of infection  
(Next Action)        Apply the appropriate dressing

KNOWLEDGES AND SKILLS

Related anatomy and physiology  
Related pharmacology  
Sterile technique as related to suturing  
Selection of type and size of suture materials to be used according to area and stress factor  
Suturing principles and techniques  
Techniques for isolating and controlling bleeders  
Techniques for physically and psychologically preparing patient  
Discrimination between tissue layers  
Current immunization schedule for tetanus prophylaxis  
Infiltration technique

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XII: Minor Surgery

MODULE 7: FACIAL SUTURING

TASKS                   a. Suture facial lacerations  
                         b. Suture muscle

PERFORMANCE OBJECTIVE

(Stimulus)           Upon receiving a patient with a facial laceration  
                         involving skin and/or muscle  
(Behavior)           The AGDC will prepare the site, administer a  
                         local anesthetic and suture the involved area  
(Conditions)          With supervision by physician (exception in  
                         selected cases); using the surgical tools and  
                         equipment required to perform the procedure  
(Criteria)           According to physician's orders  
(Consequence)       Proper and effective closure of facial laceration  
                         with good cosmetic effect  
(Next Action)       Apply appropriate sterile dressing to wound  
                         area

KNOWLEDGES AND SKILLS

Anatomy and physiology of facial skin, muscles  
and underlying structures  
Use and operation of appropriate surgical instruments  
Appropriate suture material  
Suturing techniques  
Protocol established by command policies  
Manual dexterity  
Use of surgical equipment



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XII: Minor Surgery

MODULE 8: INTRAVENOUS CUTDOWN

TASKS a. Perform intravenous cutdown

PERFORMANCE OBJECTIVE

(Stimulus)	When a patient requiring I.V. therapy has collapsed or inaccessible veins or requires fluid therapy over a significant period of time
(Behavior)	The AGDC will prepare the skin site, make an incision and insert an intracath or cannula, or
(Conditions)	With assistance; using cutdown set, cannula intracath and other appropriate supplies
(Criteria)	Performed efficiently and quickly under sterile conditions, according to established procedures and using correct size or number intracath or cannula
(Consequence)	Establishment of route of administration for I.V. fluids
(Next Action)	Connect to I.V. tubing

KNOWLEDGES AND SKILLS

Circulatory system  
Materials to be used  
Cutdown procedures  
Recognition of need for I.V. cutdown

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT XIII: ROUTINE ENVIRONMENTAL HEALTH PROCEDURES

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Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 1: IMMUNIZATIONS

TASKS                    a. Conduct and administer immunization programs  
                          b. Maintain jet hypodermic injection apparatus

PERFORMANCE OBJECTIVE

(Behavior)            The AGDC will conduct and administer immunization programs by various methods (oral or intramuscular/subcutaneous injection) as indicated  
(Conditions)        With indirect supervision; using glass and plastic syringes, needles, jet hypodermic injection apparatus, antigen  
(Consequence)      Personnel receive immunizations necessary to protect them from disease  
(Next Action)      Record personnel immunizations in the health records

KNOWLEDGES AND SKILLS

Types of immunizations  
Proper methods and technique for administering immunizations  
Preservation and storage of antigen  
Recognition of symptoms of anaphylactic shock  
Emergency treatment for anaphylactic shock  
Intervals for booster shots  
Exemptions from immunizations  
Procedures and techniques for organizing immunization programs  
Preparation, sterilization, use and maintenance of immunization equipment, e.g., jet hypodermic apparatus, glass and plastic syringes, needles  
Use of metric measurements

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 2: TUBERCULIN SKIN TESTING

TASKS                   a. Give tuberculin Mantoux skin test  
                          b. Read tuberculin test reaction

PERFORMANCE OBJECTIVE

(Stimulus)           Upon receiving a patient known to have been  
                          exposed to tuberculosis  
(Behavior)           The AGDC will administer a tuberculin skin  
                          test by injecting intradermally 0.1 cc of  
                          tuberculin purified protein derivative (PPD)  
                          and, after 48 to 72 hours, will measure  
                          the reaction  
(Conditions)       With indirect supervision; using appropriate  
                          equipment and supplies  
(Consequence)      Administration and measurement of tuberculin  
                          skin test  
(Next Action)      Refer personnel with a reaction measuring nine  
                          millimeters or more of induration for follow-up  
                          studies

KNOWLEDGES AND SKILLS

Differentiation between induration and erythema  
Administration of intradermal injections  
Principles and procedures for tuberculin  
testing  
Measuring by the metric system

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 3: VENEREAL DISEASE INTERVIEWING

TASKS	a. Obtain medical histories for epidemiologic report b. Interview VD patient c. Obtain patient's social and family history
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PERFORMANCE OBJECTIVE

(Stimulus)	Upon receiving a patient with a confirmed venereal disease report
(Behavior)	The AGDC will conduct a venereal disease epidemiologic interview
(Conditions)	Without supervision; in private; using the DOD Venereal Disease Interviewer's Guide as a reference
(Criteria)	Complete and accurate information obtained regarding the patient's social and family history with particular attention to his sexual patterns and contacts
(Consequence)	Information on sources of venereal disease infection will be obtained for tracing and treatment
(Next Action)	Record appropriate information on necessary report forms

KNOWLEDGES AND SKILLS

Techniques to communicate with apprehensive patients  
Interpretation of written instructions  
Types of venereal diseases and their etiology  
Venereal disease interviewing techniques  
Preparation of written reports  
Techniques to control the interview  
Ability to talk on the level of the interviewee  
Ability to establish rapport with the interviewee

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 4: VENEREAL DISEASE REPORTING

- TASKS
- a. Prepare reports for transmittal to other commands
  - b. Complete report forms on VD contact
  - c. Draft official correspondence

PERFORMANCE OBJECTIVE

- |               |   |
|---------------|---|
| (Stimulus)    | Following a venereal disease interview  |
| (Behavior)    | The AGDC will complete the Venereal Disease Epidemiological Report (USPHS Form 2683), transcribing all available information on identity, description and location of sexual contacts mentioned |
| (Conditions)  | Without supervision; using a separate USPHS Form 2683 for each contact  |
| (Criteria)    | According to current U.S. Navy directives   |
| (Consequence) | Necessary reports are completed to permit location and treatment of patient's sexual contacts   |
| (Next Action) | Submit completed epidemiologic report to the appropriate civilian and military health agencies  |

KNOWLEDGES AND SKILLS

Procedures for preparation of USPHS Form 2683  
Where to send completed forms  
Techniques for communicating effectively in writing and drafting written reports

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 5: INVESTIGATION OF FOODBORNE OR WATERBORNE DISEASE  
OUTBREAK

- TASKS
- a. Collect case histories
  - b. Construct a time of onset graph
  - c. Construct an attack rate table
  - d. Collect food samples for the laboratory
  - e. Collect stool and/or vomitus samples from patients for laboratory

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | In the event of an outbreak of foodborne disease   |
| (Behavior)    | The AGDC will initiate and carry out epidemiologic procedures to identify the cause of disease, mode of spread and probable reservoir of infection, and will complete the appropriate report forms |
| (Conditions)  | Without supervision  |
| (Criteria)    | According to procedures outlined in The Investigation of Foodborne Disease Outbreaks (2nd ed., 1966, International Association of Milk, Food and Environmental Sanitarians, Inc.)                  |
| (Consequence) | This procedure will identify the source of the epidemic so that steps can be taken to correct the situation and/or prevent similar outbreaks in the future   |

KNOWLEDGES AND SKILLS

Types of infectious food poisonings  
Types of chemical food poisonings  
Incubation periods for various foodborne infections or poisonings  
Common reservoirs of the various foodborne infections  
Principles and techniques for collecting, preparing and shipping material (samples) to laboratory for inspection  
Construction of time of onset graph  
Technique for interpreting time of onset graph to determine contaminated meal  
Survey techniques  
Patient interviewing techniques  
Record keeping on standard questionnaires  
Selection of samples to be collected  
Preparation of attack rate table  
Principles and techniques of data analysis  
Remedial procedures



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 6: EXAMINATION AND EVALUATION OF POTABLE WATER SUPPLY SYSTEMS

- TASKS
- a. Inspect watershed areas
  - b. Inspect water treatment plant procedures
  - c. Make a survey of treated water supply, e.g., tap, tanks
  - d. Determine whether water is safe for drinking

PERFORMANCE OBJECTIVE

- (Stimulus) When the need arises  
(Behavior) The AGDC will conduct a survey of the water supply systems (including watershed, treatment plant and distribution system) for health hazards  
(Conditions) Using appropriate equipment, e.g., membrane filter, water test kits for chlorine, pH, salinity, iron, hardness, dissolved oxygen, etc.  
(Consequence) Assure potable water sources

KNOWLEDGES AND SKILLS

Water treatment processes ashore and afloat  
Geology (water strata), hydrology  
Public health standards for water  
Water handling equipment  
The physical and chemical characteristics of water  
Distribution systems  
Water sources  
Water tracing techniques  
Standard methods for the analysis of water and waste water  
Basic map making  
Preparation of schematics  
Collection, preservation and shipment of samples for laboratory examination  
Principles and procedures for performing certain physical, chemical, microbiologic and tracer studies in the field  
Recognition of cross connections, back siphonage and back flow problems in the distribution system

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 7: CHLORINE TESTING

- TASKS
- a. Determine chlorine content of potable water
  - b. Interpret analysis results to specify appropriate use of water, e.g., drinking, washing
  - c. Determine cause and recommend correction of incomplete water purification

PERFORMANCE OBJECTIVE

- |               |   |
|---------------|---|
| (Stimulus)    | At specified intervals  |
| (Behavior)    | The AGDC will determine the free available chlorine residual, pH and temperature of potable water and interpret analysis results to specify corrective measures for any discrepancies found |
| (Conditions)  | Using a chlorine and pH colorimeter, thermometer  |
| (Criteria)    | According to the Manual of Naval Preventive Medicine (NavMed P5010)   |
| (Consequence) | Identification of insufficient chlorination when the condition exists   |
| (Next Action) | Correct any discrepancies   |

KNOWLEDGES AND SKILLS

Water chemistry  
Theory of chlorine disinfection of water  
Forms of chlorine available for use  
Safety factors of chlorine  
Factors affecting chlorine efficiency  
Substances that can increase chlorine efficiency  
Use of chlorine test kit  
Break point of chlorine  
Procedures to determine chlorine demand of water  
Procedures to determine free and combined available chlorine  
Procedures to perform pH test on water that has not been bleached out by chlorine  
Technique for explaining procedures and giving clear instructions

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 8: WATER CHLORINATION PROCEDURES

- TASKS
- a. Calculate amount of chlorine required for treatment of drinking water
  - b. Do chlorination of drinking water
  - c. Set up/review chlorine residual and pH record keeping
  - d. Recommend purification procedures for raw water supplies
  - e. Determine break point chlorination of water

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | Upon determination of a need for chlorination and in the absence of regular water treatment personnel                                  |
| (Behavior)    | The AGDC will calculate the amount of chlorine needed, chlorinate the water and set up and review chlorine, pH and temperature records |
| (Conditions)  | Using chlorination equipment when available  |
| (Criteria)    | According to the Manual of Naval Preventive Medicine (NavMed P5010)  |
| (Consequence) | An adequately chlorinated water supply   |
| (Next Action) | Make appropriate entries in the chlorine residual records  |

KNOWLEDGES AND SKILLS

Types of chlorine  
Safety precautions in handling chlorine  
Definitions of residuals, free available chlorine and combined available chlorine  
Theory of chlorine disinfection  
Factors affecting chlorine disinfection  
Understanding and calculating chlorine demand  
Methods used in chlorination practices  
Substances that increase the efficiency of chlorination  
Calculation of chlorine dosage required for a given volume of water  
Calibration and maintenance of direct displacement pumps  
Improvisation of Venturi principles in emergency chlorination of water supplies  
Procedures for isolating and disinfecting contaminated areas of a distribution system

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 9: RODENT SURVEY

- TASKS**
- a. Inspect spaces for rodent infestation
  - b. Do live trapping of rodents
  - c. Check animal for presence of ectoparasite
  - d. Conduct surveys of shipboard disease vectors
  - e. Do quarantine inspection of vessels
  - f. Conduct ship deratization exemption inspection
  - g. Identify genus and species of animals
  - h. Conduct/supervise vector control survey
  - i. Inspect and certify retrograde cargo
  - j. Prepare and ship rodent specimens

**PERFORMANCE OBJECTIVE**

- (Stimulus) When scheduled (e.g., shipboard deratization inspection, shipboard deratization exemption inspection) or upon reported, suspected or observed presence of rodents in an area
- (Behavior) The AGDC will conduct a rodent survey and determine the extent of rodent infestation. All rodents captured during the survey will be identified as to genus and species and their ectoparasites removed and identified
- (Conditions) Using appropriate equipment, e.g., tracking patches, live traps, ultraviolet lights
- (Criteria) According to the Manual of Naval Preventive Medicine (NavMed P5010) and the USPHS Center for Disease Control Booklet on Rodent Control
- (Consequence) Information for determining if a rodent problem exists in a given area
- (Next Action) Initiate a rodent control program

**KNOWLEDGES AND SKILLS**

Recognition of signs of rodent infestation,  
e.g., droppings, hairs, rubbings, gnawings  
Rodent and ectoparasite life cycles, habitats  
and behavior  
Survey techniques for rodents and ectoparasites  
Techniques for rodent inspection on ship  
Internal quarantine regulations that apply to  
rodents on ships  
U.S. Navy General Order 20  
Knowledge of rodent-borne disease  
Rodent population dynamics  
Use of survey equipment, e.g., tracking patches,  
live traps, ultraviolet light  
Use of biologic identification keys to identify  
rodents

**Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)**

**Unit XIII: Routine Environmental Health Procedures**

**MODULE 10: RODENT CONTROL**

- TASKS**
- a. Do ectoparasite extermination
  - b. Do rodent extermination
  - c. Select type of pesticide to be used for extermination
  - d. Prepare rodenticides and insecticides for use
  - e. Perform fumigation procedures
  - f. Consult on rodent proofing of buildings
  - g. Provide advice on vector/rodent control
  - h. Teach personnel use and handling of pesticides
  - i. Safeguard poisons
  - j. Evaluate results of control measure

**PERFORMANCE OBJECTIVE**

- |                      |   |
|----------------------|---|
| <b>(Stimulus)</b>    | When a rodent survey has indicated a need   |
| <b>(Behavior)</b>    | The AGDC will institute a rodent control program after the area has been treated with pesticides/insecticides for the control of rodent ectoparasites, will consult with construction and maintenance personnel on rodent proofing buildings ashore and will provide advice on rodent control aboard ship |
| <b>(Conditions)</b>  | With limited supervision; using wooden rat traps, poison bait, pesticides   |
| <b>(Consequence)</b> | Minimized threat of disease from rodents or rodent ectoparasites  |
| <b>(Next Action)</b> | Maintain a schedule of routine rodent surveys to check that rodents do not repopulate an area where eradication has been successfully carried out   |

**KNOWLEDGES AND SKILLS**

Rodent and ectoparasite behavior, habitat and life cycles  
Types of rodent-borne diseases  
Awareness of rodenticide safety procedures and uses  
Rodent control procedures, e.g., Handbook of Pest Control, by Mallis  
Fumigation practices  
Pesticide formulation procedures for rodents and ectoparasites  
Rodent population dynamics

MODULE 10 (Continued)

Ectoparasite control procedures in a rodent-infested area

Construction of bait stations

Placement of traps to take advantage of rodent behavioral patterns

Preparation (formulation, mixing and placement) of rodenticide baits

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 11: ARTHROPOD IDENTIFICATION

- TASKS
- a. Identify parasitic and disease carrying arthropods
  - b. Determine kind of pest infestation
  - c. Identify genus and species of arthropods

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receipt of a specimen collected in the survey
- (Behavior) The AGDC will identify the specimen
- (Conditions) With limited supervision; using a stereomicroscope, compound microscope, hand lens, biologic identification keys
- (Consequence) Information produced for determining if a vectorborne disease threat exists
- (Next Action) Treat the survey area with pesticides or by integrated pest control methods if necessary

KNOWLEDGES AND SKILLS

Arthropod morphology and taxonomy  
Use of taxonomic keys  
Use of optical magnification equipment, e.g., dissecting microscope  
Use of dissecting instruments in manipulating minute specimens  
Arthropod population dynamics

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 12: ANIMAL, SNAKE AND INSECT BITES

- TASKS
- a. Examine for symptoms of snake bites
  - b. Instruct personnel on action to be taken following animal/insect bite
  - c. Notify health authorities of animal bite incidents



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 13: PESTICIDE HANDLING AND SAFETY

TASKS

- a. Safeguard poisons
- b. Inspect for use of protective clothing in occupationally hazardous areas
- c. Conduct surveys on misuse of toxic materials

PERFORMANCE OBJECTIVE

(Stimulus)	When use of pesticides is required
(Behavior)	The AGDC will ensure that all pesticides are being handled and applied safely, e.g., select necessary and appropriate safety equipment; insure that pesticides are stored in proper containers under lock and key; ensure that pesticides are handled and mixed in clean, ventilated areas that can be locked when not in use; dispose of or supervise proper disposition of waste or excess pesticides and insure that all personnel who handle or apply pesticides that cause a reduction of the enzyme cholinesterase are given routine physical examinations as required by BuMed Instructions and Navy Civilian Personnel Instructions
(Conditions)	With minimal supervision; using safety equipment, e.g., pesticide resistant clothing, respirators equipped with proper filter pads, gas masks, airline masks
(Criteria)	Observing all federal, state and governmental agencies' regulations; disposition of waste or excess pesticides according to current regulations of the Environmental Protection Agency (EPA), the Navy Manual of Preventive Medicine (NavMed P5010), Military Entomology Operational Handbook (NavDocks MO-310) and other current instructions
(Consequence)	Pesticides will be applied so as not to cause any adverse effect on the applicator, environment or nontarget living organisms

KNOWLEDGES AND SKILLS

Pesticide regulations of EPA/USDA/DOD  
Pesticide toxicity (LD<sub>50</sub> acute oral and dermal levels)  
Pesticide safety procedures for application and handling

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 14: INSPECTION OF FOOD SERVICE PERSONNEL

TASKS

- a. Inspect catering operations and personnel
- b. Inspect food handlers for cleanliness and proper attire
- c. Review histories and physicals of personnel

PERFORMANCE OBJECTIVE

(Stimulus)	Upon determination of need
(Behavior)	The AGDC will inspect all food service personnel in the galley or areas where food handlers are stationed
(Conditions)	Without supervision; using personnel records
(Criteria)	Food handling personnel must meet physical standards set out in the Manual of Naval Preventive Medicine (NavMed P5010), be clean and neat in attire and have no open sores or wounds that could spread contaminants
(Consequence)	This action will determine whether food service personnel are fit to perform food service duties
(Next Action)	Report results

KNOWLEDGES AND SKILLS

- Physical standards for food service personnel
- Symptoms of various communicable diseases
- Good hygiene practices
- Recognition of personnel who may be potential health hazards

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 15: INSPECTION OF FOOD SERVICE FACILITIES

- TASKS
- a. Inspect spaces for cleanliness
  - b. Inspect bakeries for hygienic conditions
  - c. Inspect dairy products packaging and storage facilities
  - d. Inspect working areas to ensure they meet sanitary standards
  - e. Inspect food storage facilities for required temperature control
  - f. Inspect toilets and washrooms
  - g. Inspect kitchens for cleanliness
  - h. Inspect for health hazards in kitchens
  - i. Inspect mobile canteens
  - j. Inspect vending machines
  - k. Inspect civilian mess areas
  - l. Inspect indigenous eating and drinking facilities
  - m. Inspect coffee mess/dining room
  - n. Inspect spaces for insect infestation
  - c. Inspect spaces for rodent infestation
  - p. Inspect dishwashing procedures
  - q. Inspect any food preparation/service area
  - r. Inspect for adequate handwashing facilities
  - s. Inspect waste storage and disposal area
  - t. Inspect structure (i.e., floors, walls, ceilings) for good repair, ease of cleaning, preventive measures against insects and rodents, adequacy of lighting, plumbing, ventilation

PERFORMANCE OBJECTIVE

- |               |   |
|---------------|---|
| (Stimulus)    | Upon determination of need  |
| (Behavior)    | The AGDC will inspect pertinent food service areas  |
| (Criteria)    | Food service areas must meet standards set forth in the Manual of Naval Preventive Medicine (NavMed P5010), e.g., be clean, free from vermin, in satisfactory operation, in an overall sanitary condition and free of potential health and/or safety/fire hazards |
| (Consequence) | A determination of whether the food service preparation facilities meet prescribed sanitary standards   |
| (Next Action) | Correct any discrepancies found   |

## MODULE 15 (Continued)

### KNOWLEDGES AND SKILLS

Standards for food service areas and equipment  
Equipment used for refrigeration and the temperatures required  
Dairy sanitation from source to consumer  
Methods of food preservation  
Methods of food storage and factors affecting spoilage of foods  
Special precautions in storage, preparation and serving of food and drink  
Detergents and sanitizers  
Design criteria for food service facilities, equipment and utensils  
Agents involved in foodborne illnesses  
Techniques and principles of reading and calibrating thermometers  
Procedures for conversion between Fahrenheit and Centigrade scales  
Principles and techniques for disassembling and reassembling various pieces of food service equipment, e.g., dishwasher  
Use of ultraviolet light as an inspection tool  
Procedures to determine volumetric dimensions of food service operation  
Safe and effective methods of rodent and insect control in a food service operation  
Use of a sling psychrometer in humidity determinations  
Recognition of existing and potential cross-connections, back siphonage, submerged inlets in the plumbing  
Standards set by BuSandA, BuShips, BuDocks, F.D.A., USPHS and U.S. Department of Agriculture  
Recognition of safety hazards (fire, electrical, falls, etc.)  
Procedures for determination of sanitary efficiency of liquid and/or solid waste disposal  
Procedures for determination of effectiveness of bactericidal treatment

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 16: INSPECTION OF FOOD PRODUCTS

- TASKS
- a. Determine if food is fit/unfit for human consumption
  - b. Do smell and taste tests on milk
  - c. Inspect fresh produce
  - d. Provide advice on food edibility/water potability
  - e. Treat fresh fruits and vegetables suspected of bacterial/parasite contamination

PERFORMANCE OBJECTIVE

- (Stimulus) Upon determination of need  
(Behavior) The AGDC will inspect all subsistence items in food service areas  
(Conditions) Using a thermometer  
(Criteria) According to Navy standards and the Manual of Naval Preventive Medicine (NavMed P5010)  
(Consequence) These actions will determine whether food items are fit or unfit for human consumption

KNOWLEDGES AND SKILLS

Food standards for freshness and potability  
What food items are most likely to spoil easily  
Required temperature for the various items  
How stock is rotated  
Microorganisms important in food microbiology  
Principles of food preservation  
Principles of food spoilage  
Recognition of food spoilage  
Principles of food storage, including time-temperature relationships  
Agents involved in foodborne illnesses  
Reservoirs of disease-producing agents  
Primary and secondary sources of food contaminants  
Multiplication of bacterial food contaminants  
Principles and techniques for performing various examinations, e.g., for the presence of adulterants, for spoilage, organoleptic examination, microbiologic examinations to ascertain degree of chemical disinfection given certain foods

MODULE 16 (Continued)

Use of ultraviolet light as an inspection tool  
Collection, preservation and shipment techniques  
for samples to be sent for laboratory testing  
Techniques for communication with food service  
personnel

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 17: SEWAGE TREATMENT

- TASKS
- a. Inspect sewage treatment and disposal systems
  - b. Train nonmedical personnel in treatment and sampling of shipboard sewage

PERFORMANCE OBJECTIVE

- (Stimulus) When necessary  
(Behavior) The AGDC will inspect the sewage treatment and disposal system for health hazards, sample and analyze the sewage in its various stages of treatment and teach nonmedical personnel the procedures for sewage treatment, sampling and testing  
(Criteria) According to standards set forth by BuShips, BuDocks, BuMed and the Manual of Naval Preventive Medicine  
(Consequence) Verification that a condition that might be hazardous to the health of personnel is not present in the treatment and disposal system

KNOWLEDGES AND SKILLS

Field sewage disposal methods  
Septic tank systems  
Shipboard sewage disposal  
Biology of waste water  
Waste water examination procedures  
Waste water unit operations  
Sludge treatment and disposal  
Teaching skills  
Sewage treatment plants (primary-sedimentation, secondary-biological exudation, tertiary-polishing)  
Principles and techniques of various tests, e.g., biochemical oxygen demand, pH determinations, dissolved oxygen tests, chlorine residual tests, various related microbiologic tests  
Recognition of cross-connections, back siphonage and back flow  
Industrial waterborne wastes  
Oxidation ponds or lagoons  
Procedures to collect, preserve and ship samples for laboratory examination  
Principles and techniques for use of fluorescein dye or other indicator to trace contaminations

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 18: FIELD HABITABILITY INSPECTION

- TASKS
- a. Inspect field sanitation facilities
  - b. Recommend type of sanitation facilities for field construction
  - c. Supervise construction of wash-up hygienic facilities at field location
  - d. Inspect shower facilities
  - e. Inspect watershed areas
  - f. Specify preventive measures for effects of cold weather
  - g. Specify preventive measures for effects of hot weather

PERFORMANCE OBJECTIVE

- (Stimulus) Upon determination of need  
(Behavior) The AGDC will inspect field sanitation facilities and field areas of operation and will make recommendations for placement and construction of tents and sanitation/hygiene facilities  
(Conditions) Without supervision  
(Criteria) According to guidelines set forth in the Manual of Naval Preventive Medicine (NavMed P5010) and the Landing Party Manual (OpNav P34-03)  
(Consequence) Adequate field sanitation and hygiene facilities are provided during field operations to protect the health of personnel in the field

KNOWLEDGES AND SKILLS

Requirements for field hygiene and sanitation facilities  
Geology (cold and tropical)  
Water- and foodborne diseases  
Personal hygiene  
Tropical plants  
Venomous reptiles  
Interpretation of written orders  
Instructional skills  
Written and spoken communications skills



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 19: FIELD FOOD AND WATER INSPECTION

- TASKS
- a. Inspect kitchens for cleanliness
  - b. Inspect dishwashing procedures for effectiveness
  - c. Inspect food storage areas for temperature, vermin, etc.
  - d. Treat fresh fruits and vegetables suspected of bacterial/parasite contamination
  - e. Inspect watershed areas
  - f. Determine whether water is safe for raw water supply
  - g. Recommend purification procedures for raw water supply

PERFORMANCE OBJECTIVE

- |               |   |
|---------------|---|
| (Stimulus)    | When necessary  |
| (Behavior)    | The AGDC will inspect field food and water facilities   |
| (Conditions)  | Without supervision; using a thermometer  |
| (Criteria)    | According to guidelines in the Manual of Naval Preventive Medicine (NavMed P5010) and the Landing Party Manual (OpNav P34-03) |
| (Consequence) | Risk of food- or waterborne infection is reduced  |

KNOWLEDGES AND SKILLS

Food and water sanitation standards  
Techniques to chlorinate water in water buffalo or lyster bag  
Techniques to read a thermometer  
Techniques to perform chlorine testing  
Principles of field kitchen layout  
Principles of field food sanitation  
Principles of field water treatment  
Recognition of food spoilage

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 20: FIELD WASTE DISPOSAL

TASKS                      a. Inspect waste disposal operation  
                             b. Inspect refuse disposal facilities  
                             c. Provide advice on disposal of human excreta

PERFORMANCE OBJECTIVE

(Stimulus)                When necessary  
(Behavior)                The AGDC will inspect waste disposal methods  
                             in the field and recommend methods of refuse  
                             and human waste disposal  
(Conditions)              Without supervision  
(Criteria)                According to Manual of Naval Preventive Medicine  
                             (NavMed P5010)  
(Consequence)            Elimination of field sanitation situations  
                             detrimental to the health and safety of personnel

KNOWLEDGES AND SKILLS

Geology  
Field operations  
Field sanitation principles  
Methods of human waste disposal, e.g., cat hole,  
straddle trench, pit latrine  
Methods of refuse disposal, e.g., hillside  
incinerator, box-type, baffle grease traps

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 21: SPECIAL OPERATIONS--GEOGRAPHIC REGIONS

- TASKS
- a. Specify preventive measures for effects of cold weather
  - b. Specify preventive measures for effects of hot weather

PERFORMANCE OBJECTIVE

- (Stimulus) When arriving in a cold weather or tropical region
- (Behavior) The AGDC will establish a preventive medicine program by selecting campsites, procuring and storing water, employing special devices for sanitary disposal of waste and determining proper handling, transporting and preparing of food under specific conditions encountered
- (Criteria) Adequate compensation for the effects of cold or hot weather operations
- (Consequence) This action will result in safe and effective operations in a hot or cold weather area

KNOWLEDGES AND SKILLS

Geology (cold and tropical)  
Water- and foodborne diseases  
Personal hygiene  
Tropical plants  
Venomous reptiles  
Instructional techniques  
Attention to detail

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 22: HABITABILITY INSPECTIONS AND SURVEYS

**TASKS**

- a. Inspect beauty shop
- b. Inspect barber shop
- c. Judge the habitability of officer and enlisted living quarters
- d. Inspect shower facilities
- e. Inspect toilets and wash rooms
- f. Inspect spaces for insect infestation
- g. Inspect spaces for rodent infestation
- h. Inspect berthing areas
- i. Monitor contract housekeeping services
- j. Inspect schools/nurseries for hygienic conditions
- k. Inspect recreational facilities for hygienic conditions
- l. Inspect office facilities and other work areas
- m. Perform routine safety inspections
- n. Inspect spaces for adequate ventilation
- o. Inspect spaces for adequate lighting
- p. Take relative humidity readings
- q. Determine whether water is safe for recreational use, e.g., swimming pools, bathing beaches

**PERFORMANCE OBJECTIVE**

(Stimulus)	When necessary
(Behavior)	The AGDC will carry out such inspections and surveys as may be required to insure that the health, comfort and safety of military and other personnel and their dependents will be protected and will report results to commanding officer
(Conditions)	Without supervision; using various light meters, anemotherm meter, almorvelometer, thermometer, psychrometer
(Criteria)	According to guidelines set forth in the Manual of Naval Preventive Medicine (NavMed P5010)
(Consequence)	Discovery of any adverse conditions
(Next Action)	Take appropriate actions to correct any adverse condition

MODULE 22 (Continued)

KNOWLEDGES AND SKILLS

Habitability effects on health

Standards of habitability and their significance in affecting the habitability of spaces, e.g., electricity and lighting; heating and ventilation; structural, fire and general safety; waste storage and handling; pest control water supply; plumbing and recreational water supply

Use of associated equipment, e.g., light meters (e.g., G.E., Weston, Executive) anemotherm almor velometer, wet and dry bulb thermometers, psychrometer

Interpretation and correlation of instrument results and particular standard involved

Observation techniques for assessment of cleanliness

Recognition of health and safety hazards

Communication skills

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 23: INDUSTRIAL SAFETY INSPECTIONS

TASKS                    a. Perform routine safety inspections  
                          b. Remind personnel in occupationally hazardous  
                             areas to get required lab tests/physicals

PERFORMANCE OBJECTIVE

(Stimulus)	Routinely and when necessary
(Behavior)	The AGDC will conduct a general safety inspection of industrial areas such as shipyards or shipboard workshops, check for discrepancies in personnel protection equipment and provide corrective advice when necessary
(Conditions)	With indirect supervision
(Consequence)	This action will determine adequacy of personnel protective measures in industrial areas

KNOWLEDGES AND SKILLS

Basic principles of industrial hygiene and occupational health  
Safety regulations  
Industrial operating procedures  
Personnel protective equipment  
Test equipment available  
Use of test equipment

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 24: CHECKING FOR ELECTRICAL HAZARDS

- TASKS
- a. Check equipment for electrical grounding
  - b. Inspect for health hazards in confined areas, e.g., enclosed tanks
  - c. Check level of static electricity (conductivity) of floor/air
  - d. Check level of emissions from microwave ovens

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | Routinely and when necessary   |
| (Behavior)    | The AGDC will conduct an electrical safety inspection  |
| (Conditions)  | With minimal supervision; using appropriate testing equipment, e.g., electrical testing meters |
| (Criteria)    | Accurately, according to established standards   |
| (Consequence) | Detection of electrical hazards  |
| (Next Action) | Report results   |

KNOWLEDGES AND SKILLS

Basic understanding of electricity  
Electrical safety standards  
Basic industrial hygiene and occupational health  
Reading and calibration of meters  
Related mathematical computations  
Procedures for testing electrical equipment, e.g., microlight testing equipment, mine safety appliance, electrostatic sampler, anemotherm meter, almorvelometer, microwave oven testing equipment  
Ionizing vs. nonionizing radiation

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIII: Routine Environmental Health Procedures

MODULE 25: CHECKING FOR HAZARDOUS CASES AND FUMES

- TASKS
- a. Check toxic potential of cleaning agents used in closed spaces
  - b. Test for diesel gas fumes pollution of air
  - c. Test for welding gases in industrial areas
  - d. Test for carbon monoxide in closed spaces, e.g., cockpits
  - e. Recommend improvements in procedures for control of air pollutants, e.g., fumes
  - f. Inspect spaces for adequate ventilation

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | Routinely and when necessary   |
| (Behavior)    | The AGDC will calibrate testing equipment, test for hazardous gases/fumes and proper ventilation in working and living spaces and interpret results to determine if standard limits of concentration (i.e., TLV or MAC) have been exceeded |
| (Conditions)  | Using air sampling equipment and volumeters, e.g., Drager, Kitigawa  |
| (Criteria)    | Accurately and according to equipment operation manuals for detection of the exact concentration of gases  |
| (Consequence) | This action will determine whether working and living spaces have adequate ventilation and are free of toxic gases and fumes   |

KNOWLEDGES AND SKILLS

Basic chemistry  
Types of hazardous gases (e.g., carbon monoxide, welding) and fumes  
Basic industrial hygiene  
Calibration of gauges and test equipment  
Procedures for reading gauges  
Techniques and principles for interpretation of test findings  
Standard acceptable limits of gas/fume concentration, i.e., Threshold Limit Values (TLV) and Maximum Allowable Concentrations (MAC)



Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT XIV: ROUTINE DENTAL PROCEDURES

This unit includes the following modules:

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2	Soft Tissue Preliminary Examination Procedures . . . . .	123
3	Emergency Evaluation of Treatment Requirements and Referral . . . . .	124
4	Emergency Treatment . . . . .	125

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIV: Routine Dental Procedures

MODULE 1: TEETH EXAMINATION PROCEDURES

- TASKS
- a. Observe for/report symptoms of caries, simple and advanced
  - b. Observe for/report symptoms of obvious defective or missing restorations
  - c. Examine for/report symptoms of postoperative complications
  - d. Observe for/report symptoms of erosion of teeth
  - e. Observe for/report symptoms of abrasion of teeth
  - f. Observe for/report symptoms of attrition of teeth
  - g. Observe for/report symptoms of malocclusion of teeth
  - h. Observe for/report symptoms of supernumerary teeth

PERFORMANCE OBJECTIVE

- (Stimulus) When a patient is received who is in pain or seeking treatment
- (Behavior) The AGDC will observe for, report and record on patient records symptoms of caries, defective or missing restorations, postoperative complications, erosion, abrasion and attrition of teeth, malocclusion and supernumerary teeth
- (Conditions) With indirect supervision; using a mouth mirror, explorer, x-ray, light, probe and articulating paper
- (Criteria) In accordance with current AGDC rate training manuals or Color Atlas of Oral Pathology
- (Consequence) This action will provide preliminary information for diagnosis
- (Next Action) Perform soft tissue preliminary examination

KNOWLEDGES AND SKILLS

Normal number, location and appearance of teeth  
Dental radiography  
Symptoms of caries, postoperative complications, dry socket, erosion, abrasion and attrition of teeth, malocclusion and supernumerary teeth

Competency: ADVANCED GENERAL DUTY CORPSMEN (AGDC)

Unit XIV: Routine Dental Procedures

MODULE 2: SOFT TISSUE PRELIMINARY EXAMINATION PROCEDURES

TASKS                    a. Observe and report abnormalities of the  
                              soft tissue, e.g., size, color, exudates,  
                              heat, pain, loss of function

PERFORMANCE OBJECTIVE

(Stimulus)	When a patient is received who is in pain or is seeking treatment
(Behavior)	The AGDC will observe, report and record signs and symptoms of soft tissue abnormalities, e.g., size, color, exudates, heat, pain, loss of function of the soft tissues of the oral cavity, or adverse reactions to previous treatment/medication
(Conditions)	With supervision; using the mouth mirror, explorer, probe, lighting, x-ray and pressure indicating paste
(Criteria)	Degree of signs and symptoms will be reported in accordance with current AGDC rate training manuals and the Color Atlas of Oral Pathology
(Consequence)	This action will provide preliminary information for diagnosis
(Next Action)	Diagnose and plan patient treatment or refer

KNOWLEDGES AND SKILLS

Symptoms and locations of gum conditions  
Identification of periodontium by name, location, structure and function  
Normal and abnormal appearance of soft tissue of oral cavity  
Degree and types of pain  
Dental radiograph interpretation  
Common adverse reactions to dental treatment/medication  
Normal color perception

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIV: Routine Dental Procedures

MODULE 3: EMERGENCY EVALUATION OF TREATMENT REQUIREMENTS  
AND REFERRAL

- TASKS
- a. Evaluate need for emergency treatment
  - b. Determine need to notify physician/nurse of patient's condition
  - c. Consult physician or dentist to obtain information/advice
  - d. Refer patient to physician/dentist for treatment
  - e. Initiate and order diagnostic test

PERFORMANCE OBJECTIVE

- (Stimulus) When a patient reports for relief of oral discomfort in the absence of the dentist
- (Behavior) The AGDC will examine the patient, evaluate the oral condition and determine if he should render emergency treatment, seek consultation or refer the patient
- (Conditions) Without supervision, in the absence of a dentist and in the presence or absence of a physician/nurse
- (Criteria) In accordance with current AGDC rate training manuals and the Color Atlas of Oral Pathology
- (Consequence) This action will result in relief of patient pain/discomfort and/or patient referral
- (Next Action) Refer patient and/or provide emergency treatment for condition

KNOWLEDGES AND SKILLS

Normal anatomy  
Variations of normal hard and soft tissues  
Techniques of proper examinations  
Pathologic processes of appropriate disease conditions  
Techniques of using diagnostic information-gathering equipment and instruments

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XIV: Routine Dental Procedures

MODULE 4: EMERGENCY TREATMENT

- TASKS
- a. Reapply periodontal pack
  - b. Apply topical skin/lip/gingival medication, e.g., ointment, powder
  - c. Apply topical medication to mucosal tissue
  - d. Apply therapeutic agent to herpes labialis
  - e. Control secondary hemorrhage from extraction
  - f. Apply medication/treat carious lesion
  - g. Irrigate pericoronitis
  - h. Drain periodontal abscess
  - i. Apply temporary sedative crown to fractured tooth
  - j. Reinsert temporary crown
  - k. Treat dry socket, cellulitis, gingivitis, etc.
  - l. Evaluate patient's progress/response to therapeutic regime
  - m. Give emergency treatment/first aid for local oral drug reaction

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | When the AGDC has evaluated the patient's condition and determined a need for treatment of patient's pain and discomfort |
| (Behavior)    | The AGDC will perform limited emergency treatment procedures   |
| (Conditions)  | Without supervision, in the absence of a dentist and in the presence or absence of a physician                           |
| (Criteria)    | According to current AGDC rate training manuals  |
| (Consequence) | This action will relieve patient's pain and discomfort   |
| (Next Action) | Instruct patient to return for evaluation by dentist at the start of the next working day                                |

KNOWLEDGES AND SKILLS

Use of associated dental equipment  
Use of dental materials  
Medications  
Recognition of normal and pathologic tissues  
Sterile technique  
Techniques for performing emergency treatment procedures

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

COMPETENCY UNIT XV: EQUIPMENT MAINTENANCE

This unit includes the following modules:

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1	Equipment Maintenance . . . . .	127

Competency: ADVANCED GENERAL DUTY CORPSMAN (AGDC)

Unit XV: Equipment Maintenance

MODULE 1: EQUIPMENT MAINTENANCE

TASKS

- a. Review requisitions for equipment repair/replacements
- b. Determine if repair is within unit capabilities
- c. Arrange for replacement/repair of equipment as required
- d. Coordinate with other sections for assistance in fabricating equipment